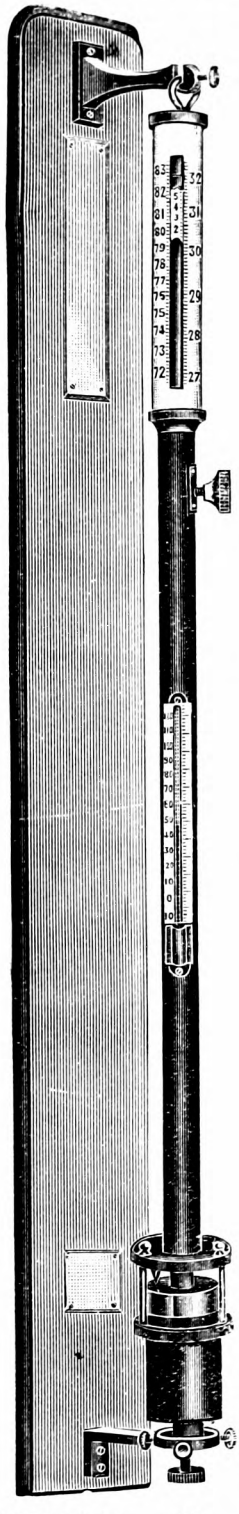
Manufacturers since 1834.

Awarded Eight Medals for Excellency.



Standard Mercurial
Barometers.

—

Meteorological
Instruments.

—

Field Glasses, &c.

CATALOGUE
ON
APPLICATION

F. DARTON & Co., Ltd.

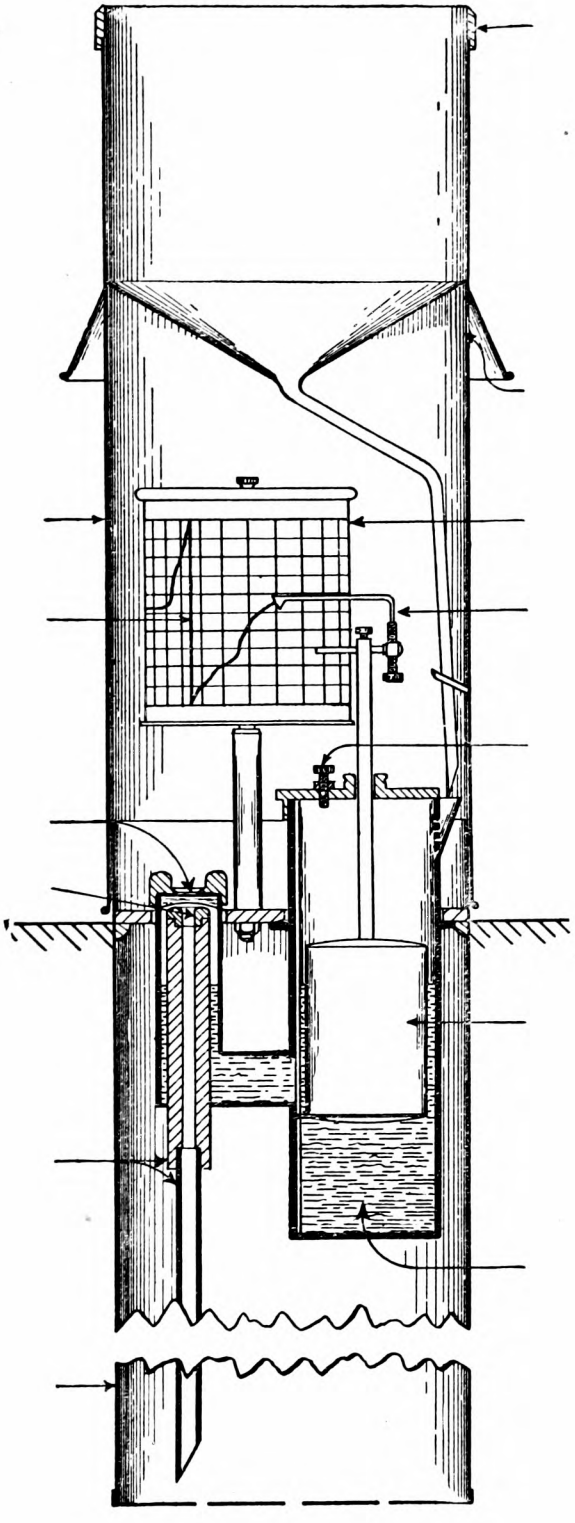
142, St. John Street, E.C.1, LONDON.

Telephone:
CLERKENWELL 5863.

Code:
A.B.C. 6th EDITION.

Telegraphic Address:
"EXCEPTIONAL, LONDON."

Makers of Meteorological Instruments since 1850



RECORDING RAIN GAUGE

With Natural Syphon Action

As the rain falls so the float is raised, and the pen makes a trace upon a chart, measuring 3·6″ × 11·8″ mounted upon a clock drum and rotating once in 24 hours. When the pen reaches the top of the chart for ·5″ of rainfall, the syphon comes into action and rapidly empties the float chamber.

For further particulars of this and other types of Rain Gauges, write to :: ::

NEGRETTI & ZAMBRA

38 HOLBORN VIADUCT
L O N D O N

116

BRITISH RAINFALL
1930

THUNDERSTORM NEAR ILKLEY, YORKS.
25TH APRIL, 1930.

Photo by A. Anning, Ben Rhydding.]

FLOOD SCENE ON THE ILKLEY – OTLEY ROAD AT ESCROFT, NEAR BEN RHYDDING.

FOR OFFICIAL USE

M.O. 335· AIR MINISTRY

METEOROLOGICAL OFFICE

BRITISH RAINFALL

1930

THE SEVENTIETH ANNUAL VOLUME OF
THE BRITISH RAINFALL ORGANIZATION

Report on the

DISTRIBUTION OF RAIN

IN SPACE AND TIME OVER THE BRITISH ISLES DURING THE YEAR 1930 AS RECORDED BY OVER 5,000 OBSERVERS IN GREAT BRITAIN AND IRELAND

WITH MAPS AND ILLUSTRATIONS

Issued by the Authority of the Meteorological Committee

Crown Copyright Reserved

LONDON:
PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE
To be purchased directly from H.M. STATIONERY OFFICE at the following addresses:
Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh;
York Street, Manchester; 1, St. Andrew's Crescent, Cardiff;
15, Donegall Square West, Belfast;
or through any Bookseller

1931

Price 15*s.* 0*d. Net*

40—10—0—30.

ERRATUM IN "BRITISH RAINFALL," 1929.

p. 228. Swansea W.W. (Nantyrwydd) *for* 107·20 *read* 82·27.

CONTENTS.

PART I.

PAGE

THE WORK OF THE BRITISH RAINFALL ORGANIZATION—*The Staff of Observers—Checking of Records—Averages—Investigations—Inspections—Survey Maps—Inquiries—Obituary* x

PART II.

RAINFALL AND METEOROLOGY OF 1930.

1. A BRIEF SUMMARY OF THE RAINFALL OF THE YEAR 2
2. THE DISTRIBUTION OF RAINFALL IN TIME—DAYS WITH RAIN .. 4
3. DROUGHTS AND DRY SPELLS 16
4. RAIN SPELLS AND WET SPELLS 23
5. DURATION OF RAINFALL 35
6. HEAVY FALLS IN SHORT PERIODS 44
7. HEAVY FALLS ON RAINFALL DAYS 56
8. MONTHLY RAINFALL 73
9. SEASONAL RAINFALL 118
10. TOTAL RAINFALL IN 1930 127
11. EVAPORATION AND PERCOLATION 132

PART III.

EXPLANATORY NOTE 143
COUNTY INDEX TO GENERAL TABLE 145
GENERAL TABLE: THE RAINFALL OF THE YEAR 146

PART IV.

REPORT ON EXPERIMENTS WITH RAIN-GAUGE SHIELDS IN EXPOSED POSITIONS DURING THE PERIOD 1ST MAY, 1930, TO 30TH APRIL, 1931, AT HUTTON JOHN, PENRITH. BY F. HUDLESTON, M.INST.C.E. .. 264

EXPERIMENTS ON THE SHIELDING OF RAIN-GAUGES AT LYMPNE AERODROME, NEAR HYTHE, KENT. BY JOHN GLASSPOOLE, M.SC., PH.D. 272

ON SOME MEASUREMENTS OF WIND VELOCITY AT THE LEVEL OF A RAIN-GAUGE 280

THE JARDI RATE-OF-RAINFALL RECORDER 284

THE CLOUDBURSTS ON STAINMORE, WESTMORLAND, JUNE 18TH, 1930. BY F. HUDLESTON, M.INST.C.E. 287

Wt 1202/6023/56 10.31 750 CT&CoLtd **Gp330.** 4467

LIST OF TABLES (PART II AND III).

TABLE		PAGE
I.	Annual General Number of Rain-days, 1917–1930 ..	9
II.	Monthly General Number of Rain-days, 1917–1930 (British Isles)	9
III.	Annual General Number of Wet-days, 1917–1930 ..	10
IV.	Monthly General Number of Wet-days, 1917–1930 (British Isles)	10
V.	Number of Rain-days and of Wet-days in 1930 (Monthly and Annual Values for 100 Selected Stations) ..	11
VI.	Comparative Summary of Droughts, 1887–1930	19
VII.	Comparative Summary of Dry Spells, 1917–1930 ..	19
VIII.	Droughts and Dry Spells in 1930 (Dates of occurrence at 100 Selected Stations)	20
IX.	Comparative Summary of Rain Spells, 1917–1930 ..	25
X.	Comparative Summary of Wet Spells 1917–1930 ..	26
XI.	Rain Spells and Wet Spells in 1930 (Dates of occurrence at 100 Selected Stations)	27
XII.	Duration of Rainfall at 81 Stations during 1930 Monthly and Annual Values	38
XIII.	Mean Rate of Rainfall at 81 Stations during 1930 Monthly and Annual Values	39
XIV.	Rainfalls of "Very Rare" Intensity, 1868–1930 ..	47
XV.	Heavy Falls in Short Periods in 1930	48
XVI.	Number of Days on which Specified Amounts of Rain fell in Specified Times during 1930	54
XVII.	Maximum Daily Fall and Maximum Percentage, 1913 to 1930	57
XVIII.	The Largest Daily Rainfalls in 1930	57
XIX.	General Rainfall for 1930. Monthly and Annual Values	74
XX.	Monthly Rainfall at 400 Stations during 1930	100
XXI.	Monthly Rainfall in 1930; the Average, 1881–1915, being taken as 100. (150 Stations, together with General Values)	113
XXII.	Seasonal Rainfall, 1929–1930, in Relation to the Average 1881–1915	124
XXIII.	Annual General Rainfall, 1930, compared with Average	129
XXIV.	Annual Rainfall of 1930 as Percentage of Average, 1881–1915. (120 Stations; see also Table XXI) ..	131
XXV.	Evaporation in 1930	136
XXVI.	Rainfall, Percolation and Calculated Evaporation in 1930	137
XXVII.	Evaporation at Camden Square, London, 1885–1930 ..	138
	County Index to General Table	145
	General Table	146–261

LIST OF ILLUSTRATIONS.

PAGE

Plate showing Flood Scene near Ilkley, 25th April, 1930 .. *Frontispiece*

Distribution of Wet Days in 1930 (Map) 5

Map of Number of Dry Spells, 1930 17

Map of Number of Rain Spells, 1930 24

Limits of Heavy Falls in Short Periods (Diagram) 44

Map of Heavy Rainfall, 20th–23rd July, 1930 64

Synoptic Chart, 21st July, 1930, 7h. 65

Map of Heavy Rainfall, 20th August, 1930 68

Map of Heavy Rainfall, Isle of Man, 17th September, 1930 70

Maps of the Total Rainfall and of the Percentage of the Average in each month in 1930 76–99

Maps of Seasonal Rainfall—

Winter Half-year, 1929–30 118

Summer Half-year, 1930 119

Twelve months, October, 1929—September, 1930 120

Map of the Distribution of Total Rainfall in 1930 .. .. .. *face p.* 128

Coloured Map of the Relation of the Rainfall of 1930 to the Average *face p.* 130

Map showing Divisions used in British Rainfall 142

Plan showing positions of gauges in enlarged western enclosure, Kilnflatt Hill 264

Vertical cross section of sheltering devices for rain-gauges 265

Plan showing positions of Experimental Gauges at Lympne 274

Diagram showing the working of the Jardi Rate-of-Rainfall Recorder .. 285

Specimen record obtained with Jardi Rate-of-Rainfall Recorder .. 286

Map showing positions of cloudbursts on Stainmore 287

BRITISH RAINFALL, 1930

PART I

THE WORK
OF THE
BRITISH RAINFALL ORGANIZATION

BRITISH RAINFALL, 1930.

PART I.

THE WORK OF THE BRITISH RAINFALL ORGANIZATION

THE STAFF OF OBSERVERS.

The detailed account of the rainfall of the year 1930 over the British Isles, which is presented in this volume, follows the lines of previous issues. The basis of the discussion is a collection of more than 5,300 returns of rainfall measurements for the year received from all parts of the country. The measurements are generally made every day, but in inaccessible districts they may be made only once a week or even once a month. Only a small number of the observers receive payment from the Meteorological Office; the great majority of the rainfall returns are contributed either by private persons, who measure the rainfall primarily as a matter of private interest, or by public local authorities, and especially the authorities of water undertakings, who find that a knowledge of the rainfall over their gathering grounds is indispensable to them in their work. These two classes of observers forward copies of their observations voluntarily for preservation by the British Rainfall Organization of the Meteorological Office as national records, and for use not only in the preparation of the annual volumes of *British Rainfall* but also for purposes of study and research. In this way records which are primarily of local interest acquire a national value which was not always realized by those who initiated them. To the numerous voluntary observers who forward their observations the Organization desires to acknowledge its indebtedness: it would be quite impossible to compile such an account as this without their assistance and goodwill.

In order to ensure, so far as possible, that the various records of rainfall summarized in the volume may be comparable with one another, the Organization issues to each observer and to anyone who is interested, a copy of a pamphlet entitled *Rules for Rainfall Observers*. This pamphlet was originally drawn up by the late Mr. G. J. Symons, F.R.S., founder of the Organization, and although it has been extensively revised since his time, yet the fundamental rules laid down by him remain practically unaltered.

The total number of records printed in Part III of this volume is 5,316, an increase of 136 records over last year. The increase in the number of records in *British Rainfall* has now been fairly steady for four years, the net increases in the volumes for 1927, 1928, 1929 and 1930 being 97, 98, 112 and 136. It is shown in the table on p. xiii that the number exceeded 5,000 in both the 1928 and 1929 volumes. The number in 1930 was greater than that of any other year except 1913, 1914 and 1915 and the setback occasioned by the war has now

definitely been overcome. Moreover, in 1923 it was decided to omit from the General Table returns from check gauges, from self-registering gauges, and from gauges exposed on roofs, apart from a few exceptional cases. Consequently some 200 or 300 returns have been omitted from the volume for some such reason, and in general invitations are no longer made to send these returns.

Many of the losses and gains of records are accounted for by the omission and restoration in a subsequent year of records which temporarily become defective owing to various causes, e.g. a leaky gauge, a faulty exposure, temporary absence of observer, etc. Thus it is possible to include the record from Gayton Waterworks, in Norfolk, which is now from a gauge in a good site. The record from Ravensthorpe Reservoir, Northamptonshire, is omitted owing to the gauge having become over-sheltered by trees. Records are now being obtained from a gauge in a satisfactory site, so that they will qualify for inclusion in a subsequent volume of *British Rainfall*.

The list also reflects the work done in improving the accuracy of the records both by actually inspecting the stations and by correspondence with the observers. At many stations standard gauges have replaced gauges of older pattern, in others the rims of the funnels have been adjusted to the standard height of 1 foot. In many cases a comparison is given between the catch of the old gauge and of the new gauge. Thus an additional record is printed for Portland Bill Lighthouse, Birmingham (Erdington) and Sevenoaks (River Hill) from a standard gauge in a site selected near the old gauge by the inspector. In a number of cases a knowledge of a record was first gained by the inspector during official duty in the district.

It is satisfactory to note that there were net gains in 1930 in each of the three countries, England, Wales and Scotland and that there is only a small loss in Ireland. The counties with the largest net gains were Somerset, Durham, S. Lancashire, Yorkshire W.R., and Ayrshire with 10, 11, 11, 13 and 17 respectively.

Of the gains in England mention may be made of three records at Erith forwarded by Mr. Harold Hind, Engineer, Erith U.D.C.; four records from Shropshire supplied by Mr. Terence More; five records to the north of Manchester supplied by Mr. E. H. Morris, District Engineer, L.M.S. Rly.; and six additional records in the Sheffield W.W. area from the Engineer and Manager, Mr. J. K. Swales. Most of the additional stations in Durham were started by observers in the district in connexion with the Biological and Chemical Survey of the River Tees, which is still being continued. Two gauges were set up on the north of Dartmoor, at Cranmere Pool and Newbridge, for which records should be available for 1931. These are perhaps the most interesting new records and our thanks are due to Mr. A. P. Cornish of Keswick, who was concerned in the establishment of these

stations, as well as to the observers, Mr. A. P. Burd of Okehampton and Mr. S. P. Harry.

The most important gains in Wales are from three new gauges in the catchment area of the Birmingham Water Works above Rhayader.

In Scotland there are important gains in Ayrshire and in the north of Scotland. The 17 net gains in Ayrshire are mainly due to the activities of Mr. W. Dunbar, Burgh Surveyor and Water Engineer of Kilmarnock, who collects the records monthly and sends a summary to all contributing observers. Most of the new stations have been inspected, so as to ensure from the start that the records are made with standard instruments and that the gauges are suitably exposed. The total number of records in Ayrshire is only exceeded by that in Inverness-shire where there were 7 net gains during the year. The records at Loch Oich and Cluanie Inn have been established through Capt. W. N. McClean in connexion with River Flow measurements in the catchment areas of the Rivers Garry and Moriston. The new records from Ben Alder (Inverness-shire) were not available for the years 1927 to 1929. The three gauges in this area were set up by the late Mr. Carle Salter in 1920 for Messrs. Balfour Beatty & Co., Ltd., Engineers to the Grampian Electricity Supply Co. They have shown that the rainfall increases very rapidly with elevation on Ben Alder, more rapidly than might have been expected having regard to the distance from the sea. Some of the largest annual totals in Scotland have been recorded at these stations, the rainfall on Ben Alder approaching that of Ben Nevis. It will be recalled that the observer, Mr. Findlay Mackintosh, rendered timely assistance to members of the Junior Mountaineering Club of Scotland who became exhausted while climbing Ben Alder at the beginning of April, 1931. Some of the difficulties experienced by rainfall observers in mountain districts are illustrated by the following notes supplied by Mr. Mackintosh :—" In addition to a walk of 12 miles up to an elevation of 2,500 ft. fuel to thaw out the gauges has had to be carried on occasions, sometimes in a blinding snowstorm. Deer often knock down the poles by using them as rubbing posts and consequently in a heavy snowstorm a gauge sometimes cannot be found."

The changes in Ireland are few and call for little comment.

Among the more serious omissions from the General Table the following stations may be mentioned :—Faringdon (The Nurseries) ; Mickleton (Bank House) where the observer Mr. M. J. Salter has been compelled to discontinue observing on account of ill health associated with old age ; Glyncorrwg Colliery and three records in Islay. The record at High Wycombe (Easton Street), which commenced in 1846 and was maintained by Mr. H. S. Wheeler and his father for over 85 years, had to be given up at the end of 1930. A record is, however, still being maintained at the Grammar school.

For assistance in the collection of the rainfall returns for the year we are especially indebted to officials of various local organizations, among whom may be mentioned :—Mr. C. P. Sinclair, of the Hertfordshire Natural History Society and Field Club, Mr. R. H. Primavesi, of the Northamptonshire Natural History Society; the late Mr. A. W. Preston, of the Norfolk Rainfall Organization; Mr. W. G. Willis Watson, of Exeter; Miss Young, Librarian at the Barnstaple Athenæum; the Rev. F. P. Synge, of the Mid-Wessex Rainfall Association; Mr. A. P. Jenkin, of the Cornwall Rainfall Association; Mr. A. A. Barnes, of the Manchester and Stockport Rainfall Organization; Mr. A. J. Jenkins, of Jersey; Miss Cordelia Marshall, of Ambleside; Mr. W. Dunbar, of Kilmarnock; and Mr. E. W. M. Murphy, of the Irish Rainfall Associaton. Col. H. C. Copeman has kindly consented to carry on the work of the Norfolk Rainfall Organization.

British Rainfall, 1930, *compared with* 1929.
Number of Records Published.

	Gain.	Loss.	Difference.	Per cent. change in year.
England	277	177	+100	+ 2·7
Wales, etc.	26	24	+ 2	+ 0·4
Scotland	60	23	+ 37	+ 4·4
Ireland	12	15	− 3	− 1·1
British Isles	375	239	+136	+ 2·6

Number of Rainfall Records Published in the Volumes of "British Rainfall" for the undermentioned Years.

Years.	England.	Wales, etc.	Scotland.	Ireland.	British Isles.	Change from previous year.	No. of Stations per 100 sq. mi.
1861	333	9	109	20	471	+ 47	0·4
1871	1038	88	311	67	1504	+ 5	1·2
1881	1548	131	313	153	2145	+ 41	1·8
1891	2091	168	359	181	2799	+ 23	2·3
1901	2616	253	442	195	3506	+ 13	2·9
1911	3705	397	701	271	5074	+198	4·2
1914	3962	450	753	288	5453	+ 83	4·5
1919	3419	436	766	277	4898	−101	4·1
1920	3460	453	758	281	4952	+ 54	4·1
1921	3577	446	784	271	5078	+126	4·2
1922	3601	470	785	270	5126	+ 48	4·2
1923	3406	442	754	262	4864	−262	4·0
1924	3438	438	756	248	4880	+ 16	4·0
1925	3437	439	750	259	4885	+ 5	4·0
1926	3418	442	775	238	4873	− 12	4·0
1927	3491	448	786	245	4970	+ 97	4·1
1928	3585	441	791	251	5068	+ 98	4·2
1929	3665	453	797	265	5180	+112	4·3
1930	3765	455	834	262	5316	+136	4·4
Difference from 1929	+100	+2	+37	−3	+136	—	0·1

County.	Records in 1929.	Records Lost.	Records Gained.	Records in 1930.	Records per 100 sq. mi. of area.
ENGLAND.					
London	58	3	3	58	50
Surrey	195	14	9	190	26
Kent	175	10	9	174	11
Sussex	171	7	9	173	12
Hampshire ..	175	11	15	179	11
Berkshire ..	61	4	6	63	9
Middlesex ..	61	2	5	64	28
Hertfordshire	87	6	7	88	14
Buckinghamshire	42	4	10	48	6
Oxfordshire ..	59	5	5	59	8
Northampton ..	64	2	1	63	6
Huntingdonshire	8	3	2	7	2
Bedfordshire ..	26	1	2	27	6
Cambridgeshire	42	4	2	40	5
Essex	107	6	7	108	7
Suffolk ..	66	3	4	67	4
Norfolk ..	80	3	3	80	4
Wiltshire ..	60	2	6	64	5
Dorsetshire ..	91	6	8	93	9
South Devon ..	193	10	14	197	12
North Devon ..	43	2	3	44	5
Cornwall ..	79	5	10	84	6
Somersetshire ..	162	8	18	172	11
Gloucestershire	96	5	5	96	8
Herefordshire	47	1	5	51	7
Shropshire ..	48	6	7	49	4
Staffordshire	63	4	3	62	5
Worcestershire	64	4	7	67	9
Warwickshire	50	5	5	50	6
Leicestershire	34	4	3	33	4
Rutlandshire ..	2	0	0	2	1·3
Lincolnshire ..	61	2	5	64	2
Nottinghamshire	55	2	3	56	7
Derbyshire ..	80	3	5	82	8
Cheshire ..	79	1	8	86	8
South Lancs. ..	122	0	11	133	19
Central Lancs. .	77	3	3	77	14
North Lancs. ..	51	0	1	52	9
Yorkshire, W.R.	303	6	19	316	11
Yorkshire, E.R.	27	2	0	25	2
Yorkshire, N.R.	90	3	6	93	4
Durham	47	3	14	58	6
Northumberland	42	1	2	43	2
Cumberland ..	55	0	3	58	4
Westmorland ..	67	1	4	70	9
MONMOUTH, WALES, ETC.					
Monmouth ..	31	3	2	30	6
Glamorgan ..	64	4	5	65	8
Carmarthen ..	19	2	0	17	2
Pembroke ..	15	3	0	12	2
Cardigan ..	19	4	2	17	2
Brecon	80	1	5	84	11
Radnor	23	0	2	25	5
Montgomery ..	23	0	1	24	3
Flint	18	1	1	18	7
Denbigh.. ..	39	2	1	38	6
Merioneth ..	22	0	1	23	3
Carnarvon ..	52	3	2	51	9
Anglesey ..	12	0	3	15	5
Isle of Man ..	10	0	0	10	4
Channel Islands	26	1	1	26	34

County.	Records in 1929.	Records Lost.	Records Gained.	Records in 1930.	Records per 100 sq. mi. of area.
SCOTLAND.					
Wigtown ..	12	1	1	12	2
Kirkcudbright	14	1	0	13	1·4
Dumfries ..	17	1	0	16	1·5
Roxburgh ..	16	0	2	18	3
Selkirk	5	0	2	7	3
Peebles ..	13	0	1	14	4
Berwick ..	13	0	1	14	3
Haddington ..	15	0	0	15	6
Midlothian ..	35	0	1	36	10
Linlithgow ..	16	1	1	16	13
Lanark	43	0	4	47	5
Ayr	51	1	18	68	6
Renfrew ..	42	1	0	41	17
Dumbarton ..	23	1	1	23	9
Stirling.. ..	39	0	2	41	9
Bute	7	0	0	7	3
Argyll	72	7	3	68	2
Clackmannan ..	8	0	0	8	15
Kinross	5	0	0	5	6
Fife	35	1	2	36	7
Perth	69	3	2	68	3
Angus (Forfar)	37	2	3	38	4
Kincardine ..	13	0	1	14	4
Aberdeen ..	37	1	1	37	2
Banff	10	0	0	10	2
Moray (Elgin)..	11	1	1	11	2
Nairn	6	0	0	6	4
Inverness ..	70	1	8	77	2
Ross & Cromarty	28	0	3	31	1·0
Sutherland ..	8	0	1	9	0·4
Caithness ..	11	0	0	11	1·6
Orkney	11	0	1	12	3
Shetland ..	5	0	0	5	0·9
IRELAND.					
Cork	21	1	0	20	0·7
Kerry	13	0	0	13	0·7
Waterford ..	6	0	1	7	0·8
Tipperary ..	14	2	0	12	0·7
Limerick ..	7	0	1	8	0·8
Clare	6	1	0	5	0·4
Wexford ..	8	2	0	6	0·7
Kilkenny ..	3	0	0	3	0·4
Wicklow ..	8	0	1	9	1·2
Carlow	5	0	0	5	1·4
Leix (Queen's Co.)	4	1	0	3	0·5
Offaly (King'sCo)	7	0	0	7	0·9
Kildare.. ..	4	0	0	4	0·6
Dublin	26	1	2	27	8
Meath	6	0	0	6	0·7
Westmeath ..	8	0	0	8	1·1
Louth	4	0	0	4	1·3
Longford ..	6	1	1	6	1·4
Galway	8	2	1	7	0·3
Roscommon ..	7	0	0	7	0·7
Mayo	8	0	0	8	0·4
Sligo	2	0	0	2	0·3
Leitrim	3	0	0	3	0·5
Cavan	4	1	0	3	0·4
Fermanagh ..	5	0	0	5	0·7
Monaghan ..	1	0	0	1	0·2
Armagh	6	1	0	5	1·0
Down	12	0	3	15	1·6
Antrim	31	2	0	29	2
Londonderry ..	10	0	1	11	1·3
Tyrone	6	0	1	7	0·6
Donegal ..	6	0	0	6	0·3

CHECKING OF RECORDS.—Every record of rainfall which is published in Part III of this volume goes through a process of examination before it is included in the table. This consists in the plotting of the monthly and annual totals of rainfall and of the annual numbers of rain days and wet days on large scale maps, of which all except the map of rain days are reproduced in the volume on much reduced scales. Isohyetal lines, or lines of equal numbers of rain and wet days, as the case may be, are then drawn on the maps. As a rule, the data are seen to be arranged regularly, in a manner depending on known principles, as discussed in an article in Part IV of *British Rainfall,* 1928, but sometimes certain values are inconsistent with those reported from neighbouring stations. The inconsistency may occur only in a single month, or it may extend over the whole year. The return in question is then examined in detail and compared with returns from neighbouring stations, when a probable explanation of the discrepancy often suggests itself. A slip in arithmetic may have occurred; a decimal point may have been misplaced; observations may have been missed during a holiday; a deputy observer not quite familiar with the work may have blundered; the amounts may be entered to the wrong day; actual mistakes may have been made in measurement, especially in measurements exceeding half-an-inch; the gauge may be unsound, giving rise sometimes to low, sometimes to high measurements; the gauge may have become sheltered by the growth of trees, bushes, or vegetables; the site of the gauge may be unsuitable. The possibilities of mistake are numerous—apparently endless—and often unexpected. A communication is then sent to the observer, setting out the circumstances and the difficulty, and, if possible, suggesting a probable explanation. Generally a satisfactory result ensues, although in many cases the real values for the doubtful entries must remain unknown, and only estimated values can be substituted. In certain cases returns are scrutinized and checked fully before the totals are plotted on the maps. This applies in particular to those returns which have been selected for use in certain tables in Part II.

Another opportunity for critically examining the returns is afforded by the preparation of the Rainfall Survey. This examination is more exacting than that undertaken year by year, since the values are plotted on a map of a larger scale and since computed averages can be compared for stations in the same locality, which were not in operation at the same time. Much has been done in improving the accuracy of the future records by correspondence with those observers whose values have appeared inconsistent on the survey maps. In some cases gauges of standard patterns have been lent, and comparisons made with gauges which have been thought to be giving defective records.

In certain cases where a record has been found to be out of

harmony with those from surrounding stations, and no explanation of the difficulty has been found after correspondence with the observer, the station has been inspected and the cause of the error ascertained.

AVERAGES PRINTED IN THE GENERAL TABLE OF BRITISH RAINFALL.—Since 1926 a column in the General Table has been devoted to the average annual rainfall at the various stations, and year by year additional values have been given. This information is supplied mainly by the Rainfall Survey which is being carried out for certain counties year by year. Mr. H. P. Cornish of Keswick has very kindly supplied additional values and we have to express our indebtedness to him for his co-operation in this connexion.

In the present volume a distinction is made in the type, according as the average quoted is (a) the mean of the 35 years 1881 to 1915 or has been weighted in this Office to give a computed mean for that period and (b) the mean of a period of 20 years, or more, but unweighted, or computed outside this Office. It is hoped to make this column much more complete in the course of a few years.

INVESTIGATIONS.—Five articles are printed in Part IV of this volume; one contributed by Mr. F. Hudleston, M.Inst.C.E., of Hutton John, Penrith, continues his account of the experiments which he is making at Hutton John into the effects on rainfall measurements of unorthodox exposures, and of the steps which can be taken to mitigate those effects. His previous contributions appeared in *British Rainfall*, 1926, 1927, 1928 and 1929. Mr. Hudleston and his family have personally expended a good deal of time on this investigation. The important results are obtained in wet, windy weather, and after or during a fall of snow, just when conditions are least suited to the comfortable execution of the measurements. Observers who measure rainfall in exposed localities, and especially water engineers, are invited to peruse his article with attention, for it contains much information that can be often applied with advantage to the improvement of the sites of rain-gauges in exposed localities.

The next two articles deal with different aspects of the same question of rain-gauge exposure. One gives an account of some *Experiments on the Shielding of Rain-gauges at Lympne Aerodrome* and the other on some measurements of *Wind Velocity at the Level of the Rim of a Rain-gauge*. In both cases the observations were made by members of the staff of the Office.

Details are also given of the *Jardi Rate of Rainfall Recorder*, which is designed to record directly the intensity of rainfall. It is hoped to be able to include records from this gauge in a subsequent issue.

Mr. Hudleston also contributes an article on the *Cloudbursts on Stainmore, Westmorland,* which supplements Section 7 of Part II.

In the technical press dealing with water engineering, there have been several papers during the year by Dr. J. Glasspoole in which the vast amount of data held by the British Rainfall Organization has been used. Among these may be mentioned :—

(a) The Reliability of Rainfall over the British Isles. *Trans. Inst. of Water Engineers,* 1930.
(b) Heavy falls of Rain in short periods (two hours or less). *Q. J. R. Meteor. Soc.* 1931, pp. 57–64.

Mention may also be made here of an article in the *Meteorological Magazine* for May, 1931 (p. 87) describing the new " Octapent " rain gauge, which has been designed mainly for use as a monthly gauge in moderately wet localities.

INSPECTIONS.—During the year ended 31st March, 1931, some 300 rainfall stations were inspected. These included a number of stations in the gathering grounds of the Metropolitan Water Board, Dundee Water Commissioners, Dunfermline District, Stirlingshire and Falkirk Water Board, District Committee of Lanarkshire (Middle Ward), East Surrey Water Company and of the Corporations of Manchester, Greenock, Swansea, Sheffield, Wolverhampton and Cardiff.

The largest groups of rain-gauges were those in the Longdendale Valley to the east of Manchester ; in the Rivelin, Loxley, Ewden and Langsett Valleys, to the west and north-west of Sheffield ; to the north of Dundee in the neighbourhood of Glamis Castle and Kirriemuir ; in Glendevon in the Ochil Hills and to the south of Gleneagles ; over the moors to the south of Greenock, where the rainfall is used to provide power as well as for domestic purposes ; in the Upper Taff Valley to the south of Brecon Beacons ; and in the Thames Valley.

It was found that the gauge at Selborne is maintained in the garden which belonged formerly to Gilbert White. It was not possible, however, to ascertain precisely where the old gauge, from which we have records January 1780 to May 1793, was maintained.

Among the many observers who have facilitated the inspections of rain-gauges in their areas, special reference should be made to Mr. L. Holme Lewis (Manchester), Mr. George Baxter (Dundee), Mr. H. F. Hodge (Dunfermline), Mr. J. MacAlister (Greenock), Major R. M. Ker (Milngavie) Mr. J. McMillan (Hamilton), Mr. W. Dunbar (Kilmarnock), Mr. A. E. Cornewall-Walker (East Surrey), Mr. F. Tomlinson (Northampton), Mr. J. K. Swales (Sheffield), Mr. B. L. McMillan (Wolverhampton), Mr. F. Hibbert (Swansea), Mr. N. J.

Peters (Cardiff) and Mr. F. J. Dixon (S. Staffordshire). The number of gauges which can be seen in a day is materially increased by the assistance of someone familiar with the district, and this co-operation is consequently especially worthy of acknowledgment.

The inspection of the rainfall stations reporting to this Office is regarded as one of the most important aspects of our work and it is hoped to increase the number of stations inspected in future years.

SURVEY MAPS.—The work on the detailed average annual rainfall map of the British Isles on the scale of two miles to the inch, for the period 1881–1915, has been continued. The map has been extended to cover the counties of Wiltshire, Devon, Somerset, Warwick, Yorkshire N.R., Durham, Northumberland, Wigtown, Kirkcudbright, Roxburgh, Selkirk, Berwick, Haddington, Ayr, Fife, Angus, Kincardine, Aberdeen, Banff, Moray, Nairn, Sutherland, Caithness and the islands of Mull, Islay and Arran, while substantial progress has been made with data for stations in many of the remaining counties. The Survey has now been completed for the whole of Wales and about half of England and Scotland. When the work now in hand is completed the whole of England and Wales will have been covered either by the present Survey or by Dr. Mill's earlier series of county maps published by the Geological Survey.

INQUIRIES.—A large number of inquiries regarding the rainfall of various parts of the country was dealt with. Among the more important of these, the following may be mentioned :—

Reports were prepared on the rainfall and on the siting of rain-gauges in the catchments areas of the Sheffield W.W., the Swansea W.W. and the Cardiff W.W.

Reports on the rainfall of certain areas were supplied to the Ministry of Agriculture, the Government of Northern Ireland and to the Borough Engineer, Newport.

Reports were supplied monthly to the Metropolitan Water Board and to the Thames Conservancy.

Details of intense falls were supplied in connexion with the flooding of sewers in a number of areas.

OBITUARY.—During the twelve months 1st July, 1930, to 30th June, 1931, reports have been received of the deaths of 45 observers who have contributed to volumes of *British Rainfall.* Of these fourteen have kept rainfall records, or been associated with relatives who have kept records for 30 years or more. A list of these is given below. In most cases the records have been maintained throughout by the same observer.

Name.	Last place of observation.	No. of years' records.
G. W. Everard	Stratford-on-Avon, Warwick ..	54
H. F. Hills	Earls Colne, Essex	52
H. F. Fryer	Chatteris, Cambs	49
A. W. Preston	Norwich, Norfolk	48
B. S. Ogle	Steeple Aston, Oxon.	46
Miss C. A. Prater	Farnborough, Warwick ..	46
Miss E. E. Duncombe	St. Neots, Hunts	43
T. A. Hill	Plumtree, Notts.	40
R. C. Coode	Launceston, Devon	38
J. S. Ineson	Ventnor, Isle of Wight ..	38
Rev. J. B. Plumptre	Danbury Rectory, Essex ..	35
J. Masson	Heathfield, Sussex	34
Rev. J. Peck	Virginia Water, Surrey ..	34
W. H. Rogers	Goldington, Beds.	30

The list includes Mr. A. W. Preston who rendered many services to the science of meteorology. Mr. Preston was Secretary of the Norfolk Rainfall Organization and collected rainfall records from the district each month for publication in the local press and for subsequent inclusion in *British Rainfall*. He started a climatological station at Eaton (Norwich) on October 1st, 1905, and forwarded returns regularly to the Meteorological Office. His rainfall observations extend back to 1883 and were made at Thorpe Hamlet, Blofield and Brundall prior to those at Eaton. We are glad to be able to report that the rainfall record is being continued by Mr. R. J. Preston, while Col. H. C. Copeman has become Secretary of the Norfolk Rainfall Organization.

BRITISH RAINFALL, 1930

PART II

RAINFALL AND METEOROLOGY

1930

1. A BRIEF SUMMARY OF THE RAINFALL OF THE YEAR, 1930.

The rainfall of 1930 over the British Isles as a whole was 115 per cent. of the average, thus continuing the remarkable run of wet years already experienced. The last dry year was 1921, since when the accumulated excess of rainfall over the British Isles as a whole has amounted to 90 per cent. of the average annual amount. In the last nine years we have received, therefore, nearly as much rain as falls on the average in 10 years. So long a run of wet years has not occurred since the nine years 1875 to 1883 when the accumulated excess was 82 per cent. or slightly less than that just recorded. From 1884 to 1902 the rainfall exceeded the average in only five out of 19 years. The table below gives the general values over the British Isles as a whole, and for the countries separately, since the famous dry year 1921. It emphasizes the unusual wetness of recent years and shows that the rainfall of 1930 was exceeded slightly in three recent years, *viz.:* 1924, 1927 and 1928.

Annual Rainfall as per cent. of Average, 1881–1915.

	1922	1923	1924	1925	1926	1927	1928	1929	1930
	%	%	%	%	%	%	%	%	%
England and Wales	105	113	120	106	102	123	115	100	117
Scotland	94	120	105	100	111	114	123	101	109
Ireland	92	110	122	99	100	108	126	106	116
British Isles ..	100	114	117	104	103	118	118	101	115

The present run of wet years can be regarded as beginning in 1907. The excesses were contributed initially by wet winters, but in more recent years the summers were particularly wet, although in the years 1928, 1929 and 1930 there has been a reversion to the earlier type. January 1930 completed a run of four months of unusual wetness. The general rainfall over the British Isles of the four months October 1929 to January 1930, amounted to 27·0 inches, or more than usually falls in the first 8½ months of the year. These four months were wetter than any similar period since before 1870, the next wettest period being October 1876 to January 1877 with 25·2 inches. At Ross-on-Wye 26·88 inches was recorded during these four months or within 1·5 inches of the average rainfall for a whole year, and the rainfall was greater than that of any other four months experienced at that station since records began there in 1818. The rainfall of the summer six months over the British Isles was 119 per

cent., but this was appreciably less than that of the recent wet summers of 1927 and 1924, with 135 and 144 per cent. respectively. The only other wetter summers in the series back to 1881 were, however, those of 1882 and 1903 with 126 and 127 per cent.

The annual totals of rainfall were less than the average over only a small part of the British Isles. Small deficiencies occurred between Newbury and Windsor, near Bournemouth, Melrose, Perth, Grantown-on-Spey, the Caledonian Canal, along the north-west coast of Scotland and near Lough Foyle. Falls of 120 per cent. were widespread and more than 140 per cent. was recorded to the south of Stafford and over the North Yorkshire Moors. Rather more than 150 per cent. occurred to the west of Whitby, due mainly to the heavy rains of July 20th to 23rd.

During 1930 wet months predominated, there being only four months, February, May, June and December in which the general rainfall over the British Isles was below the average. February was the only conspicuously dry month and February 1930 was drier than any February back to before 1870, apart from those of 1921, 1895 and 1891. The rainfall of January 1930 was exceeded in only four other Januarys, while August and September together recorded more rain than occurred in any similar months apart from those of 1918 and 1927.

The number of " wet days " over England and Wales was 11 more than the average, over Scotland 8 less and over Ireland 4 more than the average. Droughts were relatively infrequent during the year, and occurred mainly in February in the west of Scotland or in June in the south of England.

One of the most striking features of the rainfall of the year was the number of intense falls. The number recorded was greater than that of any other year back to before 1868, but this is partly due to the increase in the number of recording rain-gauges. Reference should be made to the thunderstorm at Ilkley on April 25th, when about 1·84 inches of rain and hail fell in 30 minutes ; the intense rain at Ascot on June 18th when, owing to the flooding of the racecourse, the racing was abandoned for the first time on record ; and the thunderstorm rains of August 29th. The latter followed a remarkable warm spell which set in rather suddenly after the 25th. So hot a spell during the last week in August has not been experienced since 1906.

The number of falls of 2·5 inches or more for the rainfall day was less than usual, unlike 1929 when an unusually large number were recorded. The most striking wet period was that experienced near Whitby from July 20th to 23rd. During these four days as much as 11·97 inches was recorded at Castleton, in the Yorkshire Wolds. Much damage by flooding resulted in the Esk and Leven Valleys.

2. THE DISTRIBUTION OF RAINFALL IN TIME. THE NUMBER OF RAIN-DAYS AND WET-DAYS IN 1930.

The following definitions have been used in *British Rainfall* in order to obtain a homogeneous series of statistics :—

A *rain-day* is a period of 24 hours, commencing normally at 9 a.m. on which ·01 inch, or 0·2 mm. or more of rain is recorded.

A *wet-day* is a period of 24 hours, commencing normally at 9 a.m. on which ·04 inch, or 1·0 mm. or more of rain is recorded.

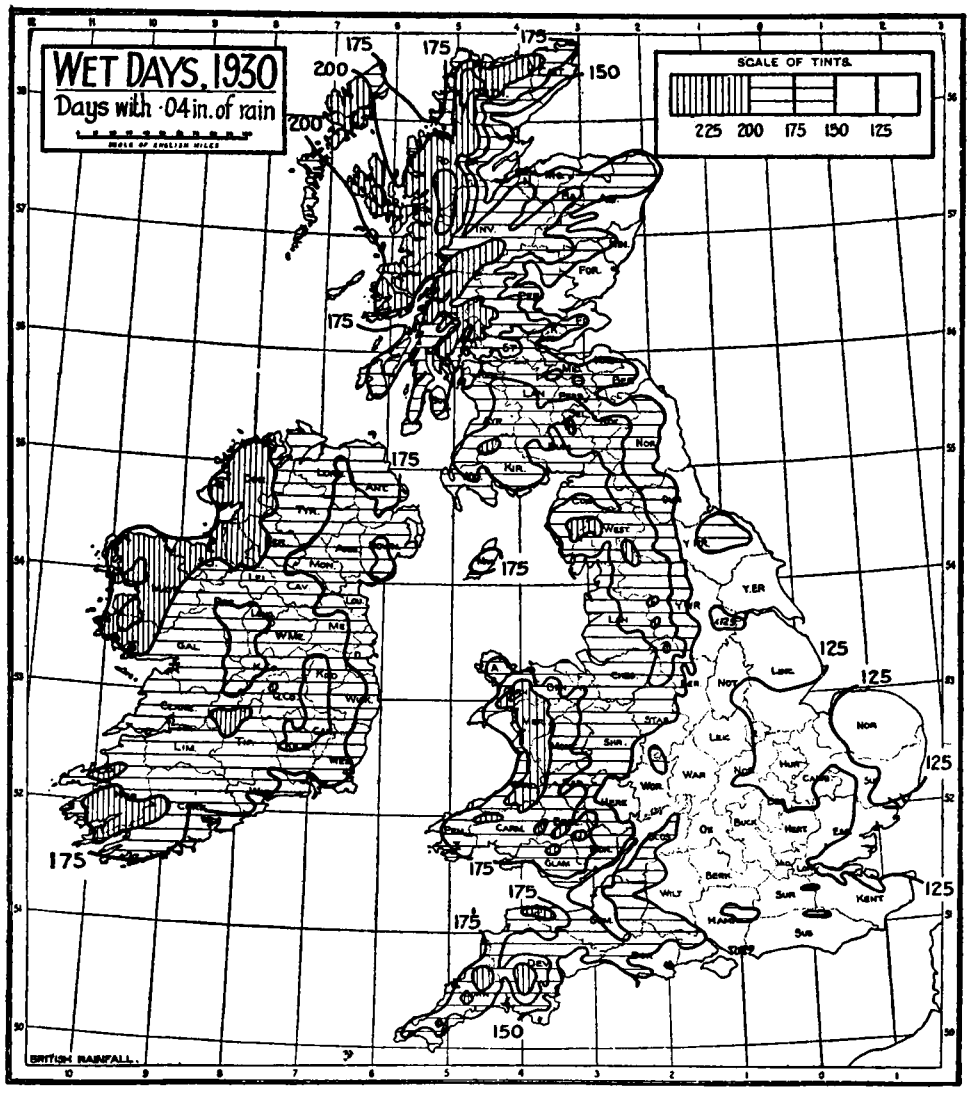
The former definition dates from the year 1865, the latter was adopted only 13 years ago. Each of the terms " rain-day " and " wet-day " is open to criticism, the latter particularly so, since it has a different meaning in ordinary use. It must, therefore, be understood that whenever these terms are used in this publication the meanings set out above are always to be attached to them.

For reasons which are set out in detail in the article entitled " The distribution over the British Isles in time and space of the annual number of days with rain," in *British Rainfall*, 1926, where is frequently a lack of harmony in the annual values of adjacent stations. In fact, the observed differences are sometimes so much greater than that of any other climatic factor, that there is little doubt that some of the individual values are incorrect. Statistics of wet-days were found to be much more consistent. It was this reason, coupled with the fact that similar data are published for certain other countries of Europe, which led to the introduction of statistics of wet-days.

Latterly, however, attention has been re-directed to the improvement of the statistics of rain-days. The Meteorological Office has standardised a new taper measure and new regulations for reporting small quantities of rain have been brought into use.

On the taper measure there is a graduation marked ·005 ; this graduation is to show the limit between the amounts which count as ·01 inch, and those which are mere " traces."

All water found in the rain-gauge is treated as rain, even though it comes from melted snow, hoar frost, dew or mist. If the gauge contains less than ·01 inch, but more than ·005 inch, the measurement should be entered as ·01 inch. The same entry is made if the measurement is exactly ·005 inch.



Number of "Wet Days" in 1930.

The circumstances in which the entry "trace" or "tr" is to be made in the daily register are as follows:—

(*a*) When there is less than ·005 inch of water in the gauge and the observer knows that this is not the result of a drop or two draining from the sides of the can after emptying the rain-water out of it at a previous time of observation, i.e., the observer must be reasonably certain that there has actually been precipitation since the preceding measurement. If the observer knows that the precipitation has been in the form of dew or wet fog this may be noted.

(*b*) The observer knows definitely *from his own observation* that some rain (or other form of precipitation such as snow, hail, sleet or drizzle) has fallen since the preceding observation, and yet finds no water in the gauge. This happens sometimes especially in dry, warm weather, without the gauge being even damp, the small amount of rain having evaporated before it got into the receiving can.

Observers who distinguish carefully between measurements of "trace" and of ·01 inch, in the manner set out above, will feel confident that their statistics of rain-days are correct. If such a precise distinction is not made, doubt may attach to the statistics of rain-days. The desirability of using taper-measures is therefore evident.

Information as to the number of rain-days and wet-days during the year is set out in this volume in various forms. As usual, the General Table of rainfall in Part III of this volume shows the number of rain-days and wet-days in 1930 as reported from each station at which daily observations were made. The number of wet-days have been plotted on a large map of which the illustration on p. 5 is a reduced copy. The distribution of the numbers is shown on the map in the usual manner.

In order to study the distribution of rain-days and wet-days throughout the year, 100 stations have been selected to represent as uniformly as possible the conditions over the whole of the British Isles. The stations are the same as those used last year except that the following records:—Warwick Castle Gardens, Whithorn (Physgill), Stonehaven (Mains of Cowie), Fort William (The Factory) and Islay (Ardbeg) replace those at Mickleton, Stoneykirk (Ardwell House), Banchory (Invercannie) and Fort William. The number of rain-days and wet-days for each month, as well as for the whole year, have been extracted from the returns from the 100 stations and printed in Table V. Monthly general numbers (for England and Wales, Scotland, Ireland and for the British Isles) have been worked from these data and they are shown in the table in heavy type. The annual mean values for 1930 are shown again in Tables I and III and the monthly mean values for 1930 in Tables II and IV, where in each case they can be readily compared wth similar values for the intervening years from 1917; and with the averages. In the case of rain-days averages are available for the standard period 1881 to 1915, but for wet-days the averages cover only the period 1917 to 1930.

The map of the annual number of wet-days during 1930 is very similar to those for earlier years. As in all the other maps there is a steady increase in the number of wet-days from the south-east to the north-west of the British Isles and from the plains of the east

coast to the mountainous regions of the west. In 1930 the number varied from about 110 in the neighbourhood of the Thames Estuary to rather more than 225 in the Western Highlands of Scotland and in the mountains of Connemara. Less than 125 wet-days occurred over a broad belt stretching from the Wash to the Thames Estuary and also to the north of Doncaster. More than 200 wet-days occurred only locally in the mountainous districts of England and Ireland, but such amounts were more common in Wales and in the north-west of Scotland.

The total number of rain-days varied from about 150 in the neighbourhood of Cambridge to about 250 in parts of the north-west of Scotland and in Connemara. The numbers recorded in all parts of the country were very close to those shown by the average map for the period 1881 to 1915 (see *British Rainfall,* 1926, p. 264) but in general there were about 10–20 more rain-days during 1930.

The general values given in Table III indicate that the frequency of wet-days over England and Wales was 11 more than the average for the period 1917 to 1930. The number for Scotland was eight less than the average and less than that of any other year back to 1918 apart from 1929 and 1919. The number for Ireland was three more and for the British Isles as a whole four more than the average.

It should be emphasized that in the case of wet-days comparable statistics are only available back to 1917, and the averages used for comparison are for the period 1917 to 1930, which includes mainly wet years. The averages are therefore greater than they would have been if statistics covering the standard period 1881 to 1915 were available. This fact is brought out by Table I, where 10 out of the last 14 years gave rain-days appreciably in excess of the average for the period 1881 to 1915.

The number of wet-days over the British Isles in each month is given in Table IV. There were only five wet-days in February, nine in June and eleven in May. October, January and August had the greatest number of wet-days with 20, 19 and 18 respectively. The number in February, 1930, was less than that in any other February except February, 1921, which also had five wet-days. On the other hand the total for October, 1930, was greater than that in any other October apart from those of 1917 and 1923 with 21 wet-days. In February there were seven less than the average, while May, June and December each had one less than the average numbers. On the other hand October and August had respectively five and three more wet-days than their averages, and the total excess for the five months July to November was ten wet-days.

In dealing with the general numbers of rain-days, given in Tables

I and II, it is possible to compare the values for 1930 with computed averages for the 35 years, 1881 to 1915. It is shown in Table I that over the British Isles as a whole there were 217 rain-days or 13 more than the average number. This total, was however, exceeded in four out of the last eight years, *viz.*, in 1928, 1927, 1924 and 1923, when the general numbers were 225, 223, 223 and 236 respectively. The excess of rain-days during the period 1918 to 1930 was so remarkable that during these 13 years, there was an accumulation of 128 rain-days in excess of the average, or as many rain-days as usually occurs in $7\frac{1}{2}$ months.

The number of rain-days during 1930 was more striking over England and Wales, where there were 19 more than the average. In the series back to 1881 (see *British Rainfall,* 1926, p. 268) that number has been exceeded in only six years, *viz.*, 1927, 1923, 1912, 1910, 1903 and 1882.

The number of rain-days over the British Isles in each month is given in Table II. There were 9 in February, 12 in June and 15 in May. October, August and January had the greatest number with 24, 23 and 23 respectively. Less than the average number of rain-days in 1930 occurred in only February and June, while the total excess during the four months July to October amounted to 16 rain-days.

During the year the mean number of rain-days per month was 18, or 1 more than the average. Of these, 14 received sufficient rain to rank as wet-days. There were five more rain-days than wet-days in March, August and December, and only three more in June and November.

There is no instance of a calendar month during 1930 without a rain-day at any station in the British Isles. In fact the longest period without a rain-day at the 100 selected stations was 20 (see Section 3). The least number of rain-days in any month was two, which occurred in June at Cambridge, while there were three in February at Maybole (in Ayrshire) and at Dougarie Lodge (in Bute). There was only one wet-day during February at Northwich (in Cheshire), Maybole (in Ayrshire) and at Fort William. A number of stations in the south-west of England recorded only two wet-days in June.

As many as 30 rain-days occurred during January at isolated stations in the English Lake District, during October in Wales, during January, August, November and December in Mull, and in October in Ireland. The largest number of wet-days at the 100 selected stations was 30, and this occurred during October at Lampeter (in Cardiganshire) and at Ballynahinch Castle (in Co. Galway).

Table I.—*Annual General Number of Rain-days (Days with ·01 in. or more) in* 1917-1930, *compared with Average,* 1881-1915†.

Year.	England and Wales. Average 188.			Scotland. Average 217.			Ireland. Average 220.			British Isles. Average 204.		
	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.
1917	185	− 3	98	217	0	100	224	+ 4	102	203	− 1	100
1918	200	+ 12	106	226	+ 9	104	227	+ 7	103	214	+ 10	105
1919	191	+ 3	102	214	− 3	99	213	− 7	97	203	− 1	100
1920	203	+ 15	108	232	+ 15	107	243	+ 23	110	220	+ 16	108
1921	158	− 30	84	224	+ 7	103	217	− 3	99	190	− 14	93
1922	196	+ 8	104	234	+ 17	108	226	+ 6	103	214	+ 10	105
1923	216	+ 28	115	257	+ 40	118	253	+ 33	115	236	+ 32	116
1924	202	+ 14	107	237	+ 20	109	248	+ 28	113	223	+ 19	109
1925	192	+ 4	102	231	+ 14	106	230	+ 10	105	212	+ 8	104
1926	192	+ 4	102	234	+ 17	108	226	+ 6	103	211	+ 7	103
1927	208	+ 20	111	233	+ 16	107	238	+ 18	108	223	+ 19	109
1928	204	+ 16	109	240	+ 23	111	247	+ 27	112	225	+ 21	110
1929	165	− 23	88	217	0	100	218	− 2	99	192	− 12	94
1930	207	+ 19	110	223	+ 6	103	232	+ 12	105	217	+ 13	107

† The averages for the period 1881–1915 are based on the records from about 100 stations distributed as evenly as possible over the country. The selection of stations is described in an article in *British Rainfall,* 1926, p. 267, and the general number of rain-days in each year from 1881 will be found in Table I of that article.

Table II.—*Monthly General Number of Rain-days (days with ·01 in. or more) in* 1917 *to* 1930, *British Isles, with Average,* 1881-1915‡.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ..	15	12	19	16	13	14	12	23	17	25	20	17	203
1918 ..	20	20	12	12	13	13	19	17	25	22	16	25	214
1919 ..	23	12	20	18	11	16	11	16	16	14	20	26	203
1920 ..	24	17	21	23	19	13	24	13	17	13	16	20	220
1921 ..	25	9	23	11	17	7	12	20	11	16	16	23	190
1922 ..	24	20	17	18	13	15	21	19	17	12	16	22	214
1923 ..	22	24	15	17	19	13	18	21	20	25	19	23	236
1924 ..	22	15	10	16	23	17	20	23	20	19	16	22	223
1925 ..	18	23	16	19	23	5	16	17	21	19	15	20	212
1926 ..	24	20	14	17	19	14	14	17	16	17	24	15	211
1927 ..	23	16	21	18	12	20	18	21	22	17	21	14	223
1928 ..	27	17	21	16	11	20	14	19	12	23	23	22	225
1929 ..	14	14	5	13	14	15	14	21	11	22	23	26	192
1930 ..	23	9	19	16	15	12	18	23	18	24	19	21	217
Average	19	17	18	15	15	14	16	17	15	19	19	20	204

‡ The average general values for England and Wales, Scotland and Ireland separately are given in *British Rainfall,* 1927, p. 7, and are discussed in an article on *The Distribution over the British Isles of the average number of days with rain during each month of the year.*—Q.J.R. Meteor. Soc. Vol. 54, 1928.

Table III.—*Annual General Number of Wet-days (Days with ·04 in. or more) in* 1917 *to* 1930, *with Average.*

	England and Wales.	Scotland.	Ireland.	British Isles.
1917	134	174	176	155
1918	150	182	188	168
1919	143	172	171	158
1920	151	185	197	171
1921	110	177	166	142
1922	146	181	178	163
1923	159	206	198	182
1924	154	184	199	173
1925	143	179	180	162
1926	141	184	173	161
1927	156	184	185	171
1928	151	193	200	175
1929	121	170	170	147
1930	155	174	186	168
Average 1917-30	144	182	183	164

Table IV.—*Monthly General Number of Wet-days (Days with ·04 in. or more) in* 1917 *to* 1930, *British Isles, with Average.*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ..	11	8	14	13	10	10	9	20	12	21	15	12	155
1918 ..	15	17	9	9	10	9	15	12	22	16	13	21	168
1919 ..	19	9	15	14	8	12	8	12	13	11	15	22	158
1920 ..	20	13	17	19	15	10	19	9	13	9	12	15	171
1921 ..	20	5	17	8	13	5	10	15	7	12	12	18	142
1922 ..	20	16	13	14	9	11	16	15	13	8	11	17	163
1923 ..	15	20	11	13	14	8	13	17	16	21	16	18	182
1924 ..	17	9	7	12	19	13	17	18	16	15	12	18	173
1925 ..	14	19	11	15	18	3	12	13	15	14	12	16	162
1926 ..	20	15	9	12	15	11	11	13	12	14	19	10	161
1927 ..	19	13	17	13	8	16	13	17	17	13	15	10	171
1928 ..	23	13	16	11	8	16	10	15	9	19	18	17	175
1929 ..	9	10	3	8	11	11	11	16	8	17	20	23	147
1930 ..	19	5	14	12	11	9	14	18	14	20	16	16	168
Average 1917-30	17	12	12	12	12	10	13	15	14	15	15	17	164

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1930.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-
ENGLAND AND WALES.															in.
London 2	St. Pancras (Camden Square)	17 14	9 5	8 7	15 12	20 17	8 4	14 11	16 13	18 13	17 11	19 16	15 12	176 135	28·84
Kent 2	Lympne Aerodrome	17 14	12 9	14 11	13 9	15 14	7 4	18 12	12 8	21 16	17 9	16 14	17 12	179 132	33·20
Sussex 3	Patcham (Brighton W.W.) ...	22 19	11 8	12 8	16 12	16 12	3 2	12 10	14 10	13 12	15 12	17 16	17 14	168 135	34·04
Hampshire .1	Ventnor (Royal National Hos.)	24 19	11 7	19 9	15 13	15 11	7 2	12 7	17 12	18 14	20 14	16 15	19 15	193 138	32·26
Hampshire..7	Selborne (The Wakes)	24 20	11 6	14 11	17 16	18 14	7 3	16 11	18 14	19 15	19 14	18 15	22 16	203 155	38·69
Berkshire ..5	Upton (Manor House)	21 16	10 3	9 5	19 11	18 14	7 4	15 12	17 10	17 13	15 8	17 16	21 16	186 128	23·91
Northants ..4	Wellingborough (Swanspool)..	19 15	12 7	9 5	20 10	14 9	9 4	15 13	17 13	20 14	18 12	16 14	17 9	186 125	26·27
Northants ..4	Eye (Northolm)	18 11	12 3	12 6	18 11	15 10	7 2	13 10	19 10	22 15	14 6	18 11	11 7	179 102	23·66
Cambridge .2	Cambridge (Botanic Gardens).	16 14	5 5	9 7	12 11	15 14	2 2	13 11	13 12	17 14	11 8	18 15	13 10	144 123	23·79
Essex 3	Great Wakering	18 14	10 4	12 9	14 7	15 11	7 2	13 11	16 8	16 12	11 5	15 14	16 9	163 106	22·71
Suffolk 2	Haughley (Haughley House) .	13 11	8 5	10 6	15 9	16 11	6 3	14 12	16 13	21 17	13 5	17 14	13 9	162 115	24·76
Norfolk 1	Gorleston	20 13	12 7	13 8	14 13	14 11	7 4	18 16	12 10	21 18	17 8	20 16	14 12	182 136	28·72
Norfolk 4	Sporle	23 13	16 10	14 7	23 15	21 14	10 7	21 14	18 12	22 18	15 8	19 16	19 11	221 145	33·11
Wiltshire ...3	Larkhill (Sch. of Artillery) ...	23 16	7 5	17 12	18 11	19 11	6 4	17 9	15 11	19 14	20 12	17 15	20 16	198 136	29·96
Dorsetshire .3	Dorchester (Wollaston House)	23 18	6 5	16 11	19 14	18 10	5 4	13 7	16 13	18 17	19 14	16 14	20 18	189 145	41·66
South Devon2	Launceston (Polapit Tamar)..	23 20	8 6	22 14	15 11	19 12	11 6	19 11	20 14	20 16	28 25	21 18	23 19	229 172	46·58
South Devon4	Holne (Church Park Cottage).	27 24	7 6	23 15	17 12	20 12	13 6	16 12	18 13	21 15	28 21	18 17	23 21	231 174	78·26
North Devon2	Barnstaple (N.Dev.Athenæum)	26 20	10 5	20 15	17 13	19 13	11 6	18 12	22 13	27 18	27 24	25 19	25 19	247 177	43·11
Cornwall ...2	St. Austell (Trevarna)	28 25	8 6	24 16	18 15	17 13	11 9	21 14	21 16	23 20	27 26	21 19	23 21	242 200	58·45
Somerset ...1	Bath (Henrietta Park)	19 17	9 5	18 10	19 14	20 14	7 3	17 13	17 14	20 16	23 18	17 15	18 16	204 155	32·77
Somerset ...3	Angersleigh (Leigh Court)	21 19	7 5	17 13	17 16	14 13	6 3	17 9	15 12	21 15	27 19	19 16	24 17	205 157	42·61
Hereford ...1	Ross (Birchlea)	22 15	9 6	19 15	15 14	18 13	10 7	18 13	19 13	20 12	22 16	18 15	22 17	212 156	33·89
Shropshire ..3	Bishops Castle (Castle Street) .	20 18	9 6	20 16	17 13	16 11	9 8	20 19	21 17	16 14	23 20	17 14	20 18	208 174	40·87
Shropshire ..4	Shifnal (Hatton Grange).....	20 15	9 4	14 12	22 16	19 12	10 6	17 14	22 16	15 10	26 17	18 15	20 15	212 152	32·87
Staffs.....5	Ashbourne (Mayfield House)..	18 16	9 4	16 11	17 16	15 10	14 9	17 14	21 13	17 12	23 19	20 13	18 13	205 150	41·70

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1930.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rainfal;.
ENGLAND AND WALES—(*con.*)															in.
Warwick ...1	Warwick Castle Gardens	17 13	8 6	9 7	17 16	16 13	9 7	13 12	16 11	15 13	19 16	18 13	18 13	175 140	28·39
Leicester ...4	Leicester (Stoughton Drive)..	17 14	10 3	13 7	19 13	17 13	14 9	13 11	20 14	19 13	17 14	15 11	19 13	193 135	27·89
Lincoln 3	Horncastle	18 12	15 8	16 9	22 16	15 9	9 8	16 12	20 11	21 18	15 11	18 14	16 10	201 138	27·59
Nottingham.5	Worksop (Hodsock Priory) ..	17 13	12 3	13 11	19 15	15 9	10 5	14 12	18 13	20 17	19 13	17 14	16 8	190 133	31·88
Cheshire ...2	Northwich (Hunts Lock).....	20 15	6 1	21 12	17 12	18 8	15 8	22 18	25 17	20 13	24 18	19 15	24 16	231 153	35·25
North Lancs.5	Blackpool (Met. Observatory).	26 20	5 4	15 11	15 7	14 7	11 7	21 13	24 20	17 11	27 23	17 14	24 19	216 156	39·92
Yorks. W.R.8	Meltham (Harewood Lodge) ..	24 17	12 8	17 14	21 17	16 12	15 10	15 14	21 19	21 17	25 20	19 18	19 16	225 182	54·25
Yorks. E.R..3	Hull (Pearson Park)	18 13	16 8	16 8	23 15	17 8	13 8	16 13	20 13	19 14	15 12	16 12	16 11	205 135	27·87
Yorks. E.R..4	Filey Vicarage	20 14	14 12	14 11	21 17	13 10	15 7	14 12	19 12	18 16	19 11	16 13	14 10	197 145	31·49
Yorks. N.R..1	West Witton (Ivy House).....	25 19	13 9	16 13	21 15	14 8	12 9	18 15	23 16	20 15	23 18	16 14	18 15	219 166	42·49
Yorks. N.R. 2	Felixkirk (Mount St. John) ..	18 16	13 8	16 10	19 15	15 11	16 9	19 15	18 14	21 14	17 14	19 12	19 13	210 151	38·70
Durham ...2	Sunderland (W. Hendon Ho.).	20 14	13 10	14 9	15 13	16 10	13 7	16 11	20 16	22 16	15 13	13 11	16 11	193 141	33·57
North'land..6	Ilderton (Lilburn Tower Gdns.)	21 15	13 12	16 13	19 16	12 9	12 7	15 13	23 16	20 17	19 12	14 14	16 14	200 158	36·94
Cumberland.1	Geltsdale	24 21	8 4	20 13	19 11	16 11	15 13	21 18	23 19	20 14	27 22	20 13	20 18	233 177	42·10
Westm'land.2	Grasmere (The Wray).....	30 28	8 4	24 18	16 15	15 12	16 14	22 16	26 23	21 15	29 28	23 15	23 22	253 210	94·07
Glamorgan..6	Treherbert (Tyn-y-waun).....	28 23	9 6	22 17	18 14	22 15	12 9	24 17	21 19	20 18	28 24	20 19	23 22	247 203	101·96
Carmarthen.2	Carmarthen (The Friary).....	27 25	6 4	23 15	16 10	24 14	13 11	21 15	21 18	24 18	29 23	19 15	24 20	247 188	56·86
Pembroke ..4	Haverfordwest (Portfield)	28 26	6 3	23 17	15 13	16 9	13 10	20 11	23 14	21 18	27 25	18 14	23 19	233 179	54·12
Cardigan ...3	Lampeter (Falcondale).....	26 21	5 4	21 18	18 14	21 16	12 12	25 20	23 19	19 14	30 29	16 14	24 22	240 203	61·98
Denbigh ...2	Denbigh (Garn)	27 16	5 4	20 13	16 11	14 11	10 7	23 17	23 20	18 14	28 24	19 15	21 17	224 169	40·30
Merioneth ..4	Dolgelly (Bryntirion)	26 22	7 5	23 17	18 13	21 17	14 9	22 22	25 23	19 16	28 26	19 15	24 23	246 208	73·34
Anglesey	Llanerchymedd (Ll'diarth Es.)	29 21	7 3	21 17	14 10	14 8	8 7	20 12	22 19	16 15	30 27	21 15	24 21	226 175	46·34
England and Wales	**(Mean of 47 Stations)**.....	**22 17**	**10 6**	**17 12**	**17 13**	**17 12**	**10 7**	**17 13**	**19 14**	**20 15**	**21 16**	**18 15**	**19 15**	**207 155**	**40·94**

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1930.—*(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rainfall.
ISLE OF MAN.															in.
Isle of Man ..	Douglas (Borough Cemetery)..	27 22	8 5	22 17	15 13	13 10	10 5	21 16	26 19	16 14	27 22	18 13	26 20	229 176	53·16
CHANNEL ISLANDS.															
Guernsey	St. Peter Port (Grange Road).	24 22	13 8	18 10	16 13	15 11	4 3	15 7	18 13	23 17	23 18	23 20	22 20	214 162	45·05
SCOTLAND.															
Wigtown ...3	Whithorn (Physgill)	27 21	6 4	17 12	15 9	11 7	11 8	20 15	25 18	13 9	29 24	15 14	21 18	210 159	40·23
Dumfries ...3	Dumfries (Crichton Inst.)	27 21	4 2	20 13	10 7	12 9	13 8	20 14	21 18	11 10	25 21	15 10	21 12	199 145	40·21
Peebles.... 1	Edin. W.W. (Victoria Lodge)..	24 22	8 4	22 14	19 12	12 10	15 12	22 14	25 21	16 12	27 24	19 18	22 17	231 180	53·58
Berwick 4	Duns Castle	20 13	14 10	16 10	20 13	16 6	13 10	15 13	24 18	20 17	21 16	16 13	16 9	211 148	34·67
Linlithgow..2	Linlithgow Academy	24 20	12 3	21 14	18 9	13 9	14 8	22 14	25 19	14 11	27 16	20 15	17 13	227 151	36·81
Lanarkshire.5	Strathaven (Dungavel).....	26 26	6 3	21 19	13 7	10 8	14 12	21 15	26 22	13 11	28 25	21 18	23 19	222 185	49·42
Ayrshire....6	Maybole (Culzean Castle).....	26 25	3 1	18 15	10 8	14 8	13 10	15 13	26 22	13 9	28 26	18 15	22 16	206 168	42·68
Renfrew ...3	Greenock (Prospect Hill).....	26 22	7 2	20 15	12 11	12 9	13 12	19 14	27 21	13 11	29 26	20 19	23 17	221 179	65·31
Buteshire ..6	Dougarie Lodge.....	24 22	3 3	19 16	13 9	9 7	12 11	20 10	23 20	13 9	28 25	19 15	25 17	208 164	46·73
Argyllshire..6	Dalmally (Manse of Glenorchy)	27 26	4 3	19 17	10 10	13 10	14 13	17 16	26 25	14 12	29 26	21 19	23 19	217 196	83·20
Argyllshire.14	Islay (Ardbeg).....	22 18	7 4	20 17	12 9	11 8	16 12	20 15	28 25	16 14	29 26	20 19	25 21	226 188	50·69
Argyllshire.14	Mull (Gruline)	30 28	14 4	22 17	14 12	17 12	21 17	23 15	30 26	18 12	29 28	30 24	30 24	278 219	86·91
Argyllshire.14	Tiree (Cornaigmore Sch.).....	29 26	7 2	22 15	14 11	14 9	19 18	18 14	26 23	12 11	29 26	28 21	28 22	246 198	47·18
Fifeshire....3	Leuchars (Training Base)	22 13	10 7	16 7	17 10	14 5	13 9	17 12	22 18	14 12	23 13	15 11	13 10	196 127	31·93
Perthshire .11	Aberfeldy (Dall Avon)	23 19	9 7	14 10	15 7	15 8	12 7	17 11	22 15	15 14	24 21	20 14	18 11	204 144	42·84
Kincardine .2	Stonehaven (Mains of Cowie)..	19 10	11 7	16 10	19 14	13 7	11 10	9 8	20 18	17 13	17 12	17 15	17 14	186 138	32·93
Aberdeen ..1	Balmoral (Castle Gardens) ...	21 12	12 9	23 12	20 14	21 10	13 8	21 9	27 20	25 16	28 17	19 14	18 9	248 150	39·09
Aberdeen ..4	Peterhead (Forehill Works) ..	15 11	12 10	16 10	20 17	15 13	13 13	12 7	24 22	19 17	22 16	24 21	19 15	211 172	38·39
Morayshire .2	Gordon Castle	14 8	11 7	14 8	16 12	12 8	11 9	18 14	21 18	20 17	22 15	22 14	15 12	196 142	31·96
Inverness ..3	Cluny Castle	26 22	9 4	20 13	18 12	20 17	16 14	18 13	25 21	20 14	29 24	22 17	21 13	244 184	37·72
Inverness .16	Fort William (The Factory) ..	29 26	4 1	15 14	17 12	16 11	17 17	16 11	28 24	16 12	28 26	19 16	22 21	227 191	75·37

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1930.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	Total Rainfall.
SCOTLAND —(*con.*).															in.
Inverness .18	Skye (Portree)	29 27	4 2	24 19	20 16	18 14	19 18	21 11	26 23	16 13	28 27	28 26	26 24	259 220	71·59
R'&Cromarty3	Fortrose	13 9	7 3	15 5	16 11	17 9	13 7	24 14	24 19	20 13	24 15	20 15	15 8	208 128	26·73
R'&Cromarty8	Loch Torridon (Bendamph)	29 28	5 3	20 19	16 15	15 15	17 15	12 12	25 25	17 16	28 27	23 23	21 21	228 219	77·15
R'&Cr'm'rty10	Stornoway	28 24	8 6	22 19	18 14	14 11	21 14	18 9	28 20	18 13	28 25	27 21	29 24	259 200	45·74
Sutherland .1	Lairg	14 11	8 6	7 6	21 14	14 12	16 10	19 9	21 18	16 11	21 18	19 18	12 11	188 144	38·40
Sutherland .5	Loch More (Achfary)	27 25	12 9	24 21	20 15	17 15	18 15	22 16	28 26	18 14	29 26	25 25	28 27	268 234	81·13
Caithness ..3	Thurso (Buckies)	19 17	10 9	16 15	18 13	16 16	15 15	14 13	25 23	18 17	24 23	21 21	19 18	215 200	43·29
Scotland	**(Mean of 28 Stations)**	**24 20**	**8 5**	**19 14**	**16 11**	**14 10**	**15 12**	**18 12**	**25 21**	**16 13**	**26 22**	**21 18**	**21 16**	**223 174**	**49·71**
IRELAND.															
Co. Cork....6	Dunmanway (The Rectory)	28 27	8 6	23 19	15 9	11 7	13 11	16 13	23 15	18 14	28 25	20 15	23 19	226 180	63·75
Co. Cork....7	Glanmire (Lota Lodge)	24 23	6 5	21 18	13 11	13 9	13 9	14 10	24 20	15 13	25 19	17 15	23 16	208 168	49·69
Co. Cork....9	Mallow (Longueville)	26 23	9 3	23 17	14 10	13 7	14 13	21 14	26 19	18 13	30 26	20 16	22 16	236 177	45·51
Co. Kerry...3	Cahirciveen (Valentia Obsy.)	29 25	8 4	24 19	15 13	16 12	15 11	20 14	29 23	20 18	28 25	23 16	26 20	253 200	65·43
Waterford ..3	Waterford (Brook Lodge)	22 20	7 4	23 19	12 11	11 8	14 12	13 11	22 19	18 13	26 21	18 13	18 15	204 166	44·87
Tipperary ..1	Nenagh (Castle Lough)	24 21	6 6	20 17	13 12	12 9	14 12	23 17	26 22	14 14	27 24	22 13	20 15	221 182	47·77
Tipperary ..3	Cashel (Ballinamona)	27 22	8 6	24 19	15 10	17 14	13 10	17 12	28 18	16 13	29 25	20 16	20 14	234 179	46·50
Limerick ...2	Foynes (Coolnanes)	26 23	5 4	24 15	13 10	12 7	14 13	19 16	26 20	14 13	29 27	22 17	25 21	229 186	45·76
Co. Wexford 4	Gorey (Courtown House)	25 21	9 5	22 15	16 12	13 10	15 8	13 11	26 16	17 15	25 17	16 13	18 12	215 155	45·56
Queen's Co. .2	Abbey Leix (Blandsfort)	26 24	9 7	25 20	15 14	14 13	12 11	19 14	25 20	19 16	30 23	16 13	25 19	235 194	46·51
Co. Dublin..2	Dublin (Fitz William Square)	24 15	8 7	23 15	15 11	14 7	13 9	22 16	23 21	20 18	24 17	15 12	16 13	217 161	35·89
Co. Meath ..4	Kells (Headfort)	23 21	8 5	25 18	15 11	11 7	12 9	18 14	28 19	19 12	28 24	15 12	22 13	224 165	43·05
Co. W'meath1	Moate (Coolatore)	25 20	10 6	25 19	15 11	18 10	14 13	22 19	27 21	19 15	29 22	21 14	26 16	251 186	37·26
Co. Longford2	Castle Forbes Gardens	24 22	5 4	21 20	13 12	10 6	13 9	21 18	27 22	16 16	28 28	14 13	21 20	213 190	39·91
Co. Galway .3	Ballynahinch Castle	28 27	5 5	22 21	12 10	13 11	18 18	25 18	28 25	17 17	29 29	25 21	27 26	249 228	75·90

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1930.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
IRELAND —(*con*).															in.
Co. Mayo ...4	Mallarany	27 27	9 4	22 22	14 10	13 12	17 17	25 23	27 24	16 15	28 28	23 22	28 25	249 229	63·28
Co. Sligo ...2	Collooney (Markree Obsy.)....	24 22	8 5	25 21	14 11	15 11	16 16	25 22	26 23	18 14	30 30	21 15	27 22	249 212	48·49
Co. Cavan ..1	Belturbet (Cloverhill)	26 20	6 4	22 15	17 13	16 9	14 10	20 15	28 20	21 17	30 25	18 11	22 13	240 172	34·91
Co. Down...2	Seaforde	24 22	8 3	18 18	12 10	15 13	10 7	19 16	29 23	19 13	27 23	15 14	17 12	213 174	42·45
Co. Antrim .5	Ballymena (Harryville)	25 22	7 7	22 18	12 10	15 9	14 11	19 17	29 26	15 12	29 25	19 16	22 17	228 190	44·59
Co. Tyrone..3	Omagh (Edenfel).....	24 20	8 6	23 17	15 14	17 12	16 13	23 13	29 24	17 12	28 27	20 17	25 16	245 191	44·18
Co. Donegal.3	Milford (The Manse)	24 20	7 4	24 17	16 9	16 7	19 14	22 18	26 22	19 16	30 26	21 17	25 22	249 192	45·27
Co. Donegal.5	Killybegs (Rockmount)	21 18	7 3	23 20	16 13	15 11	17 15	24 18	28 24	18 14	29 27	20 17	25 23	243 203	52·25
Ireland	**(Mean of 23 Stations)**.....	**25 22**	**7 5**	**23 18**	**14 11**	**14 10**	**14 12**	**20 16**	**27 21**	**18 14**	**28 24**	**19 15**	**23 18**	**232 186**	**48·21**
British Isles..	**(Mean of 100 Stations)**.....	**23 19**	**9 5**	**19 14**	**16 12**	**15 11**	**12 9**	**18 14**	**23 18**	**18 14**	**24 20**	**19 16**	**21 16**	**217 168**	**45·23**

3. ABSOLUTE DROUGHTS, PARTIAL DROUGHTS AND DRY SPELLS IN 1930.

As in the analogous case of rain-days and wet-days (Section 4), certain definitions have to be adopted in order to obtain a reliable body of statistical information on the subject of droughts. The definitions used are :—

An **absolute drought** is a period of at least 15 consecutive days, to none of which is credited ·01 inch of rain or more ;

A **partial drought** is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed ·01 inch ;

A **dry spell** is a period of at least 15 consecutive days to none of which is credited ·04 inch of rain or more.

These terms are used in *British Rainfall* only in the senses stated. More concise definitions of two of these terms would be :—An *absolute drought* is a period of at least 15 days, none of which is a rain-day ; a *dry spell* is a period of at least 15 days, none of which is a wet-day.

In Table VIII are given particulars of the absolute droughts, partial droughts and dry spells, which occurred at the 100 selected stations of Table V. Stations from which no droughts were reported are omitted from this table.

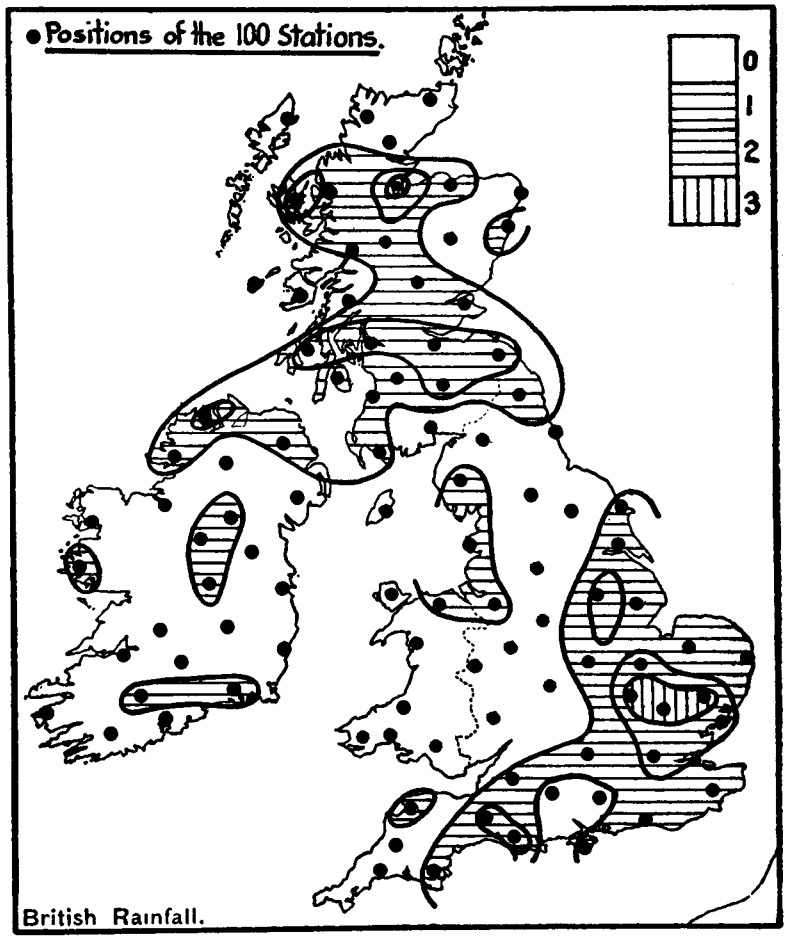
In striking contrast to 1929, when only one of the 100 stations failed to record either a drought or a dry spell, there were in 1930 as many as 39 stations without one. The year 1930 was comparable, therefore, with 1927 in this respect, since in that year 40 stations recorded no drought or dry spell.

In Tables VI and VII the number of droughts and dry spells recorded in 1930 are compared with those of each year from 1917 to 1929. In the case of absolute droughts and dry spells similar information is available as far back as the famous dry year 1887 (see *British Rainfall* 1929, page 20), and averages are therefore available for the 44 years 1887 to 1930.

The total number of absolute droughts recorded in 1930 was 16, or 44 less than the average 1887 to 1930. In only four years have fewer absolute droughts been recorded, *viz.*: in 1927, 1923, 1904 and 1902 with 11, 11, 12 and 10 respectively. The number

of partial droughts was not so remarkable, being 29 or only 22 less than the average.

Of the 100 stations, 86 had no absolute drought and 72 no partial drought. In only three years has an absolute drought occurred at a larger number of stations, *viz.*: 1927, 1923 and 1902 with 90, 89 and 90 respectively. There were 45 stations, or 16 more than the average, without a dry spell during 1930. The relative infrequency



Number of Dry Spells, 1930.

of droughts was, therefore, one of the most remarkable features of the incidence of the rainfall of 1930.

The longest absolute drought occurred at Talla Water (Victoria Lodge) in Peebleshire and lasted for 20 days from May 20th to June 8th. It is most unusual for a station in this mountainous area in the Southern Uplands of Scotland to record the longest period of no rain in the British Isles. The station is maintained by Messrs.

Leslie & Reid, Engineers to the Edinburgh Water Trust, and they have confirmed the absence of rain during this period. The longest partial drought occurred at Eye, in Northamptonshire, and lasted for 42 days, from June 1st to July 12th, during which period only ·32 inch of rain was measured. The longest dry spell lasted 22 days and occurred at some eight stations in the south of England and in Guernsey during the end of May and early part of June.

All the droughts were confined to the first seven months of the year, the latest date in Table VIII being July 13th. The partial droughts fall naturally into three groups. The most widespread partial drought occurred during February and the first half of March. This partial drought affected the central districts of England and the south of Scotland. There was only one partial drought at the 23 stations in Ireland, *viz.*: at Castle Forbes (Co. Longford) from February 2nd to March 3rd. The partial drought from about May 15th to June 16th occurred at stations along the east coast of Scotland and the extreme north of England. At Eye, in Northamptonshire, and at Gorleston, in Norfolk, a partial drought occurred during June and the first half of July.

The absolute droughts occurred mainly either in February in the west of Scotland or in June in the south of England.

The dry spells naturally include all the absolute droughts, but the period covered by a dry spell is often longer than that of an included absolute drought, while the list of dry spells contains periods which do not qualify as absolute droughts. The total number of dry spells is shown in the sketch map. There were three dry spells at stations to the south of the Fen district and near the Moray Firth. As in the case of absolute droughts the dry spells occurred mainly in February and June. An unusual feature of the dry spells of 1930 was that there were nearly as many in Scotland as in England.

Table VI.—*Comparative Summary of Droughts*, 1917–1930.

Year.	ABSOLUTE DROUGHTS.* No. of Droughts at 100 Stations.	Mean Duration	Longest.	Stations without one.	PARTIAL DROUGHTS.† No. of Droughts at 100 Stations.	Mean Duration.	Longest.	Stations without one.
		Days.	Days.			Days.	Days.	
1917	109	19	28	23	64	33	61	46
1918	20	16	18	83	14	34	47	87
1919	33	18	31	68	44	38	50	63
1920	18	17	22	84	22	37	54	79
1921	86	19	38	47	109	42	89	30
1922	63	17	23	46	44	36	51	66
1923	11	17	24	89	20	38	54	80
1924	50	16	22	55	25	36	57	81
1925	74	23	33	37	76	38	60	29
1926	20	17	24	83	43	36	57	64
1927	11	17	19	90	19	32	43	83
1928	50	17	22	57	41	33	43	70
1929	110	20	37	14	99	47	85	35
1930	16	17	20	86	29	31	42	72
Average 1887–1930	60	18	26	54	51	36	56	60
1930 diff. from Average.	−44	−1	−6	+32	−22	−5	−14	+12

* 15 days without a "rain day." † 29 days averaging not more than ·01 in.

Table VII.—*Dry Spells*, 1917–1930 (*i.e.*, 15 days without a "wet day.")‡

Year.	Number at 100 Stations.	Mean Duration.	Longest Spell.	Number of Stations with None.	1 or 2.	3 or 4.	5 or more.
		Days.	Days.				
1917	193	20	31	5	70	25	0
1918	118	17	26	36	47	17	0
1919	98	19	38	35	62	3	0
1920	56	18	31	55	44	1	0
1921	201	21	58	21	43	29	7
1922	162	18	30	13	65	22	0
1923	65	18	29	54	43	3	0
1924	120	17	29	32	56	12	0
1925	164	22	43	14	65	21	0
1926	98	19	40	30	65	5	0
1927	91	17	31	43	49	8	0
1928	115	19	31	25	68	7	0
1929	215	22	53	1	65	31	3
1930	76	18	22	45	51	4	0
Average 1917–1930	127	19	35	29	57	13	1

‡ A day with ·04 in. or more.

TABLE VIII.—*Droughts and Dry Spells in* 1930.

County and River Division.	Station.	Absolute Droughts.			Partial Droughts.				Dry Spells.			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
ENGLAND AND WALES				days			days	in.			days	in.
London 2	St. Pancras (Camden Square)..	..	..	..	Feb. 3	Mar. 5	31	·31	Feb. 18	Mar. 5	16	·01
		..	..	..	..	..	..	..	June 24	July 12	19	·04
Kent 2	Lympne Aerodrome.....	..	..	..	..	..	..	..	June 1	June 22	22	·06
Sussex 3	Patcham (Brighton W.W.)....	June 1	June 19	19	..	..	..	..	June 1	June 19	19	·00
Hampshire ..1	Ventnor (Roy. Nat. Hospital)..	..	..	..	..	..	..	..	June 1	June 22	22	·11
Berkshire ...5	Upton (Manor House).....	..	..	..	Feb. 2	Mar. 8	35	·33	Feb. 15	Mar. 8	22	·12
Northamp- 4 tonshire.	Wellingborough (Swanspool)..	..	..	..	Feb. 8	Mar. 8	29	·29	..	..	..	..
		..	..	..	..	..	..	..	Mar. 16	Mar. 31	16	·08
		..	..	..	..	..	..	..	June 1	June 17	17	·08
		..	..	..	..	..	..	..	June 24	July 12	19	·04
„ 4	Eye (Northolm)	..	..	..	Feb. 7	Mar. 8	30	·29	Feb. 15	Mar. 5	19	·06
		..	..	..	June 1	July 12	42	·32	June 1	June 17	17	·07
Cambridge ..2	Cambridge (Botanic Gardens)..	Feb. 16	Mar. 5	18	Feb. 2	Mar. 5	32	·28	Feb. 16	Mar. 5	18	·00
		June 1	June 17	17	..	..	..	..	June 1	June 17	17	·00
		June 24	July 12	19	..	..	..	..	June 24	July 13	20	·01
Essex.....3	Great Wakering.....	..	..	..	..	..	..	..	Feb. 16	Mar. 5	18	·03
		June 1	June 15	15	..	..	..	..	June 1	June 22	22	·02
Suffolk.....2	Haughley (Haughley House)..	..	..	..	Feb. 5	Mar. 5	29	·28	Feb. 17	Mar. 5	17	·01
		..	..	..	..	..	..	..	Mar. 16	Mar. 31	16	·07
		June 1	June 15	15	..	..	..	..	June 1	June 15	15	·00
Norfolk 1	Gorleston.....	..	..	..	June 2	July 9	38	·30	June 2	June 23	22	·07
„ 4	Sporle.....	..	..	..	..	..	..	..	Feb. 17	Mar. 5	17	·07
Dorsetshire..3	Dorchester (Wollaston House).	..	..	..	..	..	..	..	Feb. 5	Feb. 24	20	·02
		June 2	June 19	18	..	..	..	..	June 1	June 19	19	·01
S. Devon....4	Holne (Church Park Cottage) .	..	..	..	..	..	..	..	June 1	June 15	15	·07
N. Devon...2	Barnstaple (N. Dev. Athenæum)	..	..	..	..	..	..	..	June 2	June 18	17	·08
Somersetshire1	Bath (Henrietta Park).....	..	..	..	Feb. 4	Mar. 5	30	·29	..	..	..	..
		June 2	June 18	17	..	..	..	..	June 1	June 22	22	·08
„ 3	Angersleigh (Leigh Court).....	..	..	..	..	..	..	..	Feb. 5	Feb. 24	20	·03
		..	..	..	..	..	..	..	June 1	June 18	18	·03
Shropshire ..4	Shifnal (Hatton Grange).....	..	..	..	Feb. 2	Mar. 3	30	·26	..	..	..	..
Staffordshire.5	Ashbourne (Mayfield House)..	..	..	..	Feb. 3	Mar. 4	30	·27	..	..	..	..

TABLE VIII.—*Droughts and Dry Spells in* 1930—(*con.*).

County and River Division.	Station.	Absolute Droughts.			Partial Droughts.				Dry Spells.			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
				days			days	in.			days	in.
Warwickshire 1	Warwick (Castle Gardens).....	..	..	..	Feb. 5	Mar. 8	32	·31	..	..	..	..
Leicestershire 4	Leicester (Stoughton Drive)...	..	..	..	Feb. 5	Mar. 8	32	·32	Feb. 15	Mar. 5	19	·14
Lincolnshire.. 3	Horncastle.....	..	..	..	..	..	..	..	June 24	July 12	19	·06
Nottingham- 5 shire.	Worksop (Hodsock Priory)....	..	..	..	Feb. 7	Mar. 8	30	·30	Feb. 5	Feb. 24	20	·14
		..	..	..	..	..	..	..	June 23	July 13	21	·02
Cheshire 2	Northwich (Hunts Lock).....	..	..	..	Feb. 1	Mar. 4	32	·28	Feb. 15	Mar. 4	18	·09
N. Lanca- 5 shire.	Blackpool (Met. Observatory).	..	..	..	Feb. 2	Mar. 4	31	·29	..	..	..	..
		..	..	..	..	..	..	..	May 18	June 8	22	·07
Yorkshire 3 E.R.	Hull (Pearson Park).....	June 28	July 12	15	..	..	..	..	June 28	July 12	15	·00
,, 4	Filey Vicarage	..	..	..	..	..	..	..	June 26	July 12	17	·04
Northumber- 6 land.	Ilderton (Lilburn Tower Gdns.)	..	..	..	May 18	June 16	30	·27	May 24	June 8	16	·01
Cumberland .1	Geltsdale	..	..	..	Feb. 2	Mar. 4	31	·25	..	..	..	..
Westmorland 2	Grasmere (The Wray).....	..	..	..	..	..	..	..	May 20	June 8	20	·03
Denbigh 2	Denbigh (Garn).....	..	..	..	..	..	..	..	May 24	June 9	17	·04
CHANNEL ISLANDS.												
Guernsey	St. Peter Port (Grange Road)..	June 1	June 15	15	..	..	..	..	May 31	June 21	22	·07
SCOTLAND.												
Wigtown ...3	Whithorn (Physgill).....	..	..	..	..	..	..	..	May 20	June 8	20	·04
Dumfries....3	Dumfries (Crichton Inst.).....	..	..	..	Jan. 29	Mar. 2	33	·31	..	..	..	..
Peebles 1	Edin. W.W. (Victoria Lodge)..	..	..	..	..	..	..	..	Feb. 15	Mar. 2	16	·05
		May 20	June 8	20	..	..	..	..	May 20	June 8	20	·00
Berwickshire 4	Duns Castle.....	..	..	..	..	..	..	..	Feb. 7	Feb. 21	15	·07
		..	..	..	May 19	June 16	29	·29	May 24	June 8	16	·02
Linlithgow ..2	Linlithgow Academy.....	..	..	..	Feb. 2	Mar. 4	31	·31	Feb. 15	Mar. 2	16	·11
		..	..	..	..	..	..	..	May 19	June 8	21	·08
Lanarkshire..5	Strathaven (Dungavel).....	..	..	..	Feb. 2	Mar. 2	29	·28	..	..	..	..
		..	..	..	..	..	..	..	May 20	June 7	19	·02
Ayrshire 6	Maybole(Culzean Castle Gardens)	Feb. 16	Mar. 2	15	Jan. 30	Mar. 2	32	·30	Feb. 15	Mar. 2	16	·03

TABLE VIII.—*Droughts and Dry Spells in* 1930—(*con.*).

County and River Division.	Station.	Absolute Droughts.			Partial Droughts.				Dry Spells.			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
				days			days	in.			days	in.
Renfrew 3	Greenock (Prospect Hill).....	..	..	..	..	..	..	..	Jan. 30	Feb. 13	15	·06
		..	..	..	..	..	..	..	May 20	June 7	19	·03
Buteshire ...3	Dougarie Lodge.....	..	..	..	Feb. 2	Mar. 2	29	·23	..	..	..	..
		..	..	..	..	..	..	..	May 20	June 7	19	·03
Argyllshire .14	Islay (Ardbeg)	..	..	..	..	..	..	..	Feb. 17	Mar. 3	15	·03
		..	..	..	..	..	..	..	May 20	June 5	17	·02
Fifeshire 3	Leuchars (Training Base).....	Feb. 7	Feb. 21	15	..	..	..	..	Feb. 5	Feb. 21	17	·02
		..	..	..	May 18	June 16	30	·29	..	..	..	..
Perth.....11	Aberfeldy (Dall Avon).....	..	..	..	..	..	..	..	April 5	April 22	18	·15
Kincardine ..2	Stonehaven (Mains of Cowie)..	..	..	..	May 15	June 16	33	·28	May 20	June 5	17	·07
Moray 2	Gordon Castle	..	..	..	..	..	..	..	Jan. 8	Jan. 27	20	·09
Inverness ...3	Cluny Castle.....	..	..	..	..	..	..	..	Feb. 15	Mar. 4	18	·05
,, 17	Fort William (The Factory) ..	Feb. 16	Mar. 4	17	..	..	..	..	Feb. 15	Mar. 4	18	·02
,, 18	Skye (Portree)	..	..	..	..	..	..	..	Jan. 30	Feb. 13	15	·06
		..	..	..	..	..	..	..	Feb. 16	Mar. 4	17	·05
Ross and 3 Cromarty.	Fortrose.....	..	..	..	..	..	..	..	Jan. 14	Feb. 2	20	·05
		..	..	..	..	..	..	..	Feb. 16	Mar. 4	17	·01
		..	..	..	May 19	June 19	32	·31	May 28	June 16	20	·09
,, 8	Loch Torridon (Bendamph) ..	Feb. 17	Mar. 6	18	..	..	..	..	Feb. 16	Mar. 6	19	·03
Sutherland ..1	Lairg	..	..	..	Feb. 15	Mar. 15	29	·15	..	..	..	..
IRELAND.												
Co. Cork....9	Mallow (Longueville)	..	..	..	..	..	..	..	Feb. 4	Feb. 24	21	·05
Co. Water- 3 ford.	Waterford (Brook Lodge).....	..	..	..	..	..	..	..	Feb. 4	Feb. 24	21	·03
Co. West- 1 meath.	Moate (Coolatore)	..	..	..	..	..	..	..	May 19	June 8	21	·13
Co. Longford.2	Castle Forbes Gardens.....	..	..	..	Feb. 2	Mar. 3	30	·29	..	..	..	..
		May 21	June 7	18	..	..	..	..	May 18	June 7	21	·04
Co. Galway..3	Ballynahinch Castle	..	..	..	..	..	..	..	April 24	May 8	15	·03
Co. Cavan...1	Belturbet (Cloverhill).....	..	..	..	..	..	..	..	May 18	June 7	21	·06
Co. Antrim..5	Ballymena (Harryville).....	..	..	..	..	..	..	..	May 20	June 7	19	·07
Co. Donegal..3	Milford (The Manse).....	..	..	..	..	..	..	..	Feb. 16	Mar. 2	15	·06
		..	..	..	..	..	..	..	May 18	June 7	21	·10
,, 5	Killybegs (Rockmount)	..	..	..	..	..	..	..	Feb. 16	Mar. 3	16	·04

4. RAIN SPELLS AND WET SPELLS IN 1930.

The definitions of the terms " rain spell " and " wet spell " as used in this section, are analogous to those of the terms " absolute drought " and " dry spell," which are used in the previous section. Thus :—

A Rain Spell is a period of at least 15 consecutive days to each of which is credited ·01 inch of rain or more.

A Wet Spell is a period of at least 15 consecutive days to each of which is credited ·04 inch of rain or more.

In other words, a *rain spell* contains at least 15 consecutive rain days, and a *wet spell* contains at least 15 consecutive wet days.

Table XI contains particulars of all rain spells* and wet spells* during 1930 which were reported from the 100 selected stations of Table V. Stations from which no rain or wet spells were reported are omitted from this table. The number of stations so omitted is 32. Tables IX and X give comparative statistics concerning the rain spells and wet spells since 1917. Similar details of rain spells are available back to 1903 and are given in *British Rainfall*, 1929, p. 30.

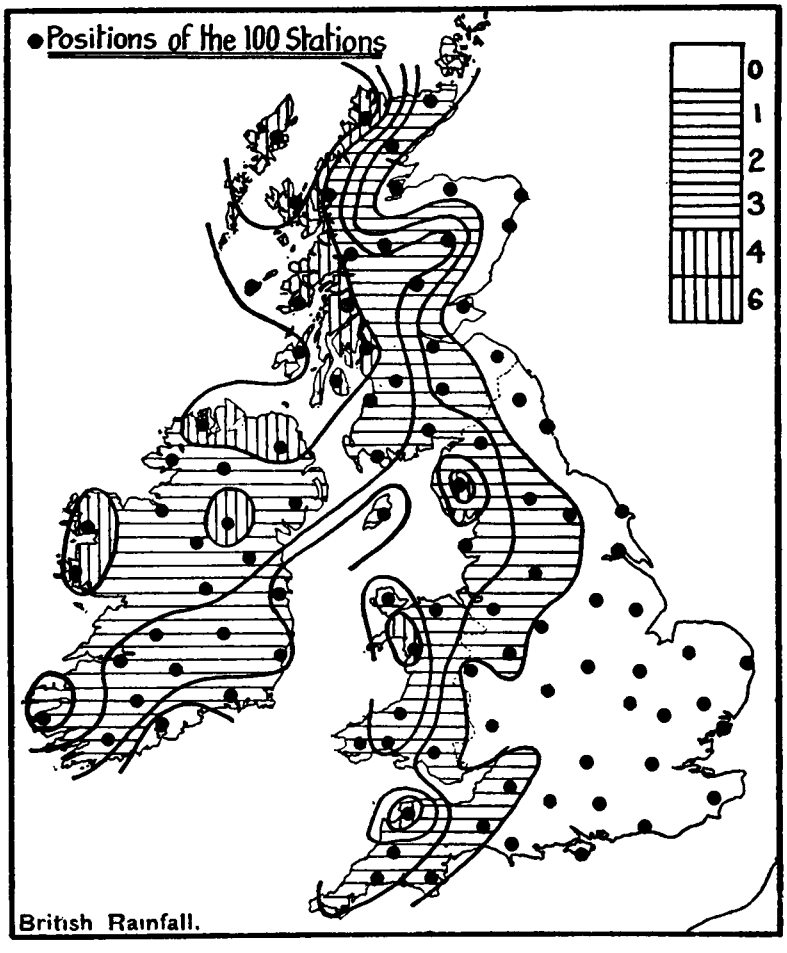
In 1930, the total number of rain spells at the 100 stations was 174 or exactly the average. The mean duration of the rain spells was 23 days, or two more than the average. The mean rain per day during the rain spells was also in excess of the average.

The longest rain spell continued for 72 days from October 3rd to December 13th at Mull (Gruline). This is the longest rain spell recorded at the 100 stations in any year back to 1903, apart from 1923 when there were 89 consecutive days with rain from August 12th to November 8th at Islay (Eallabus). It is worthy of comment that both these long rain spells occurred in the West of Scotland. Rain spells occurred during 1930 at 68 stations, *i.e.*, four less than the average and fewer than any year back to 1924 when only 67 stations recorded a rain spell. Fewer stations than usual recorded one or two rain spells, but the number of stations with three or four was eight more than the average. Only three stations recorded five or more and these were all situated in the extreme north-west

* The precise procedure adopted in the allocation of rain spells or wet spells which cover parts of two years is set out in the footnote on p. 25, *British Rainfall*, 1926.

of Scotland, *viz.*, Skye (Portree) with 6, Stornoway with 6, and Loch More (Achfary) with 8.

The total number of wet spells at the 100 stations was 15 in excess of the average and the duration of the wet spells and the mean rain per day were both slightly in excess of the average. The longest wet spell lasted for 35 days, from December 25th, 1929, to January 28th, at Loch Torridon (Bendamph) and during this period



Number of Rain Spells, 1930.

18·02 in. was recorded. From the point of view of the quantity of rain the rain spells of this period at Treherbert (Tyn-y-Waun) and Fort William were more striking. At the former station 21·27 in. was recorded in 24 days and at the latter 20·78 in. in 30 days. Wet spells occurred at 7 more stations than usual out of the 100.

The total number of rain spells is shown in the diagram. As is usually the case they were confined to the western half of Great Britain and to Ireland. Wet spells affected a smaller area, and

occurred almost entirely at stations in the English Lake District, Wales, the Devon–Cornwall Peninsula, the western half of Scotland and the north-western half of Ireland.

One of the most widespread rain spells commenced at the end of 1929 and continued into 1930, and at a few stations a further rain spell covered the latter half of January. The next widespread rain spell occurred in part of August, and was recorded at most stations in the western half of Scotland and in the northern half of Ireland as well as in the English Lake District, North Wales, Valentia and the east coast of Ireland. A further widespread rain spell occurred from about October 2nd to November 18th, and many stations also recorded a rain spell during the greater part of December.

The wet spells were, naturally, less frequent than the rain spells. The wet spells occurred more definitely in the four main groups: (*a*) the beginning of January, (*b*) about August 8th to 30th, (*c*) about October 2nd to November 18th, and (*d*) December 4th to 23rd.

Table IX.—*Comparative Table of Rain Spells* at* 100 *Stations,* 1917—1930.

Year.	No. of Rain Spells	DURATION OF SPELLS				STATIONS WITH			
		Mean.		Greatest.					
		Days.	Mean rain per day.	Days.	Mean rain per day.	None.	1 or 2.	3 or 4.	5 or more.
1917....	152	22	·28	52	·19	30	48	17	5
1918....	186	23	·30	56	·21	21	51	19	9
1919....	143	20	·26	46	·31	29	53	14	4
1920....	165	20	·25	45	·24	32	45	12	11
1921....	184	22	·29	45	·25	31	36	25	8
1922....	170	21	·26	49	·35	30	42	23	5
1923....	222	23	·26	89	·31	17	47	21	15
1924....	168	19	·25	54	·23	33	41	18	8
1925....	176	19	·29	60	·34	27	43	23	7
1926....	194	20	·28	45	·14	21	37	38	4
1927....	206	19	·26	42	·19	21	43	26	10
1928....	202	24	·27	52	·27	28	43	21	8
1929....	157	21	·32	57	·27	19	58	15	8
1930....	174	23	·30	72	·42	32	36	29	3
Average 1903–1930	174	21	·27	53	·27	28	43	21	8

* At least ·01 inch each day, 15 days or more.

Table X.—*Wet Spells* (*at least* ·04 *in. each day,* 15 *days or more*); 100 *Stations;* 1917—1930.

Year.	Number of Wet Spells.	Mean Duration.		Longest Spell.		STATIONS WITH			
		Days.	Mean rain per day.	Days.	Mean rain per day.	None.	1 or 2.	3 or 4.	5 or more
			in.		in.				
1917....	55	19	·35	31	·46	67	28	3	2
1918....	49	21	·40	36	·44	70	26	4	0
1919....	49	17	·29	33	·34	66	29	5	0
1920....	47	18	·37	31	·61	75	17	8	0
1921....	59	20	·41	29	·32	69	22	9	0
1922....	65	20	·36	42	·28	64	29	7	0
1923....	62	20	·36	42	·39	73	17	8	2
1924....	30	18	·34	24	·37	79	19	2	0
1925....	55	17	·42	31	·18	67	27	6	0
1926....	60	19	·37	30	·48	62	32	6	0
1927....	39	18	·35	24	·29	74	22	4	0
1928....	87	20	·40	39	·29	62	21	17	0
1929....	59	19	·41	33	·40	59	36	4	1
1930....	71	21	·40	35	·51	61	30	9	0
Average 1917–1930	56	19	·37	33	·38	68	25	7	0

Table XI.—*Rain Spells and Wet Spells in* 1930.

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
ENGLAND AND WALES				days	in.			days	in.		in.
Hampshire..1	Ventnor (Royal National Hos.).	20.xii.29	Jan. 5	17	3·02	..	..	..	..	Jan 4	·61
S. Devon ...2	Launceston (Polapit Tamar)...	19.xii.29	Jan. 7	20	5·86	..	..	..	..	20.xii.29	·90
		Oct. 13	Nov. 9	28	7·01	Oct. 14	Oct. 29	16	4·64	Oct. 22	·95
,, ...4	Holne (Church Park Cottage)...	Oct. 19	Nov. 2	15	3·89	..	..	..	..	Nov. 1	·87
N. Devon...2	Barnstaple (N. Dev. Athenæum)	*5.xi.29*	*Jan. 14*	*71*	*19·00*	..	..	..	..	*24.xi.29*	*·99*
		Jan. 20	Feb. 4	16	3·20	..	..	..	..	Feb. 3	·71
		Sept. 15	Oct. 9	25	5·17	..	..	..	..	Sept. 18	·68
		Oct. 14	Oct. 29	16	3·52	..	..	..	..	Oct. 22	1·01
Cornwall....2	St. Austell (Trevarna).....	19.xii.29	Jan. 15	28	8·65	19.xii.29	Jan. 5	18	5·75	24.xii.29	·84
		Oct. 19	Nov. 5	18	5·36	Oct. 19	Nov. 5	18	5·36	Oct. 22	·86
Somerset- 1	Bath (Henrietta Park).....	Sept. 12	Sept. 29	18	3·67	..	..	..	..	Sept. 19	·77
shire 3	Angersleigh (Leigh Court).....	Sept. 25	Oct. 9	15	1·82	..	..	..	..	Oct. 4	·37
Shropshire..4	Shifnal (Hatton Grange).....	Oct. 13	Nov. 3	22	2·94	..	..	..	..	Oct. 25	·51
Cheshire ...2	Northwich (Hunts Lock).....	Aug. 1	Aug. 15	15	1·91	..	..	..	..	Aug. 13	·35
N. Lancs...5	Blackpool (Met. Observatory)..	23.xii.29	Jan. 14	23	6·12	..	..	..	..	28.xii.29	·85
		Dec. 6	Dec 20	15	2·57	..	..	..	..	Dec 10	·67
Yorks W.R. .8	Meltham (Harewood Lodge)....	20.xii.29	Jan. 14	26	11·75	..	..	..	..	25.xii.29	1·60
,, N.R..1	West Witton (Ivy House).....	31.xii.29	Jan. 14	15	4·94	31.xii.29	Jan. 14	15	4·94	Jan. 10	·86
,, N.R..2	Felixkirk (Mount St. John)....	19.xii. 29	Jan. 5	18	3·12	..	..	..	..	24.xii.29	·68
Cumberland .1	Geltsdale	23.xii.29	Jan. 14	23	7·73	..	..	..	..	28.xii.29	1·18
										Oct. 4	·72
		Oct. 3	Oct. 24	22	3·90	..	..	..	..	Oct. 15	·72
Westmorland2	Grasmere (The Wray).....	22.xii.29	Jan. 14	24	19·67	22.xii.29	Jan. 14	24	19·67	28.xii.29	3·10
		Jan. 16	Feb. 2	18	3·35	..	..	..	..	Jan. 17	·74
		Aug. 7	Aug. 26	20	9·75	..	..	..	..	Aug. 21	3·00
		Oct. 3	Nov. 3	32	19·01	Oct. 3	Oct. 25	23	15·16	Oct. 15	1·98
Glamorgan..6	Treherbert (Tyn-y-waun).....	19.xii.29	Jan. 14	27	23·79	22.xii.29	Jan. 14	24	21·27	28.xii.29	2·40

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
ENGLAND AND WALES —(*con.*)				days	in.			days	in.		in.
Carmarthen..2	Carmarthen (The Friary).....	19.xii.29	Jan. 14	27	11·99	22.xii.29	Jan. 14	24	10·73	28.xii.29 Jan. 10	}1·17
		Oct. 3	Nov. 4	33	9·07	..	..	..	..	Oct. 15	2·15
		Dec. 6	Dec. 20	15	4·24	..	..	..	..	Dec. 10	·77
Pembroke- 4 shire	Haverfordwest (Portfield).....	19.xii.29	Jan. 14	27	11·04	26.xii.29	Jan. 14	20	7·85	20.xii.29	1·05
		Sept. 12	Sept. 26	15	5·15	..	..	..	..	Sept. 17	1·25
Cardigan ...3	Lampeter (Falcondale)	22.xii.29	Jan. 14	24	9·78	22.xii.29	Jan. 14	24	9·78	Jan. 10	1·12
		Oct. 2	Nov. 3	33	10·02	Oct. 11	Nov. 2	23	7·17	Nov. 1	1·11
		Dec. 6	Dec. 20	15	4·56	..	..	..	..	Dec. 11	·76
Denbigh ...2	Denbigh (Garn)	22.xii.29	Jan. 14	24	6·56	..	..	..	..	Jan. 10	·88
		Oct. 14	Nov. 3	21	4·36	Oct. 14	Oct. 30	17	2·74	Nov. 1	·92
Merioneth ..4	Dolgelley (Bryntirion)	22.xii.29	Jan. 14	24	11·44	22.xii.29	Jan. 10	20	9·66	Jan. 10	1·41
		Aug. 1	Aug. 23	23	8·69	..	..	..	..	Aug. 20	1·59
		Oct. 14	Nov. 4	22	8·70	Oct. 14	Nov. 3	21	8·68	Oct. 22	1·53
		Dec. 6	Dec. 20	15	5·32	Dec. 6	Dec. 20	15	5·32	Dec. 10	1·10
Anglesey	Llanerchymedd (Ll'diarth Es.)..	22.xii.29	Jan. 10	20	5·77	..	..	..	..	Jan. 10	·84
		Oct. 2	Nov. 3	33	8·29	..	..	..	..	Oct. 16	1·00
		Dec. 6	Dec. 20	15	3·38	..	..	..	..	Dec. 10	·90
ISLE OF MAN											
Isle of Man..	Douglas (Borough Cemetery)...	Dec. 5	Dec. 19	15	4·23	..	..	..	..	Dec. 15	1·36
CHANNEL ISLANDS											
Guernsey	St. Peter Port (Grange Road)..	20.xii.29	Jan. 5	17	4·66	..	..	..	..	24.xii.29	·83
		Jan. 22	Feb. 5	15	3·35	..	..	..	..	Jan. 31	·57

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
SCOTLAND				days	in.			days	in.		in.
Wigtown ...3	Whithorn (Physgill).....	23.xii.29	Jan. 14	23	5·19	..	..	..	..	31.xii.29	·83
		Aug. 7	Aug. 21	15	3·80	..	..	..	..	Aug. 18	1·02
		Oct. 13	Nov. 1	20	5·72	..	..	..	..	Oct. 29	1·09
Dumfries ...3	Dumfries (Crichton Inst.).....	31.xii.29	Jan. 14	15	3·57	..	..	..	..	Jan. 10	·85
		Oct. 10	Oct. 24	15	4·01	..	..	..	..	Oct. 11	·72
Peebles 1	Edin. W.W. (Victoria Lodge)..	Oct. 3	Oct. 24	22	7·34	..	..	..	..	Oct. 15	1·35
Linlithgow..2	Linlithgow Academy.....	Oct. 6	Oct. 24	19	2·94	..	..	..	..	Oct. 7	·65
Lanarkshire.5	Strathaven (Dungavel).....	*17.xii.29*	*Jan. 13*	*28*	*11·02*	19.xii.29	Jan. 13	26	10·95	*22.xii.29*	*1·75*
		Aug. 7	Aug. 25	19	5·12	..	..	..	..	Aug. 19	1·06
		Oct. 3	Oct. 25	23	5·80	..	..	..	..	Oct. 16	·84
Ayrshire....6	Maybole (Culzean Castle Gdns.).	28.xii.29	Jan. 13	17	4·58	28.xii.29	Jan. 13	17	4·58	Jan. 1	·67
		Aug. 11	Aug. 30	20	5·27	..	..	..	..	Aug. 18	1·45
		Oct. 4	Nov. 2	30	7·31	..	..	..	..	Oct. 29	·69
Renfrew ...3	Greenock (Prospect Hill).....	22.xii.29	Jan. 13	23	12·73	23.xii.29	Jan. 13	22	12·72	28.xii.29	1·31
		Aug. 8	Aug. 30	23	6·10	..	..	..	..	Aug. 25	1·59
		Oct. 3	Nov. 2	31	10·66	Oct. 9	Oct. 24	16	6·96	Oct. 17	1·13
		Dec. 15	Dec. 29	15	4·49	..	..	..	..	Dec. 25	1·36
Buteshire ..3	Dougarie Lodge	28.xii.29	Jan. 12	16	4·91	28.xii.29	Jan. 12	16	4·91	28.xii.29	·82
		Oct. 3	Oct. 17	15	3·77	..	..	..	..	Oct. 7	·75
		Oct. 19	Nov. 2	15	4·15	..	..	..	..	Oct. 29	·68
		Dec. 10	Dec. 29	20	4·22	..	..	..	..	Dec. 12	·78
Argyllshire..6	Dalmally (Manse of Glenorchy)..	23.xii.29	Jan. 14	23	15·14	23.xii.29	Jan. 14	23	15·14	Jan. 1	1·93
		Aug. 10	Aug. 25	16	6·45	Aug. 10	Aug. 25	16	6·45	Aug. 25	1·39
		Oct. 3	Nov. 2	31	12·42	Oct. 9	Oct. 25	17	8·64	Oct. 12	1·08
		Dec. 15	Dec. 31	17	6·18	..	..	..	..	Dec. 26	1·07
,, ...14	Islay (Ardbeg).....	19.xii.29	Jan. 13	26	7·53	22.xii.29	Jan. 12	22	6·98	31.xii.29	·80
		Aug. 6	Aug. 29	24	6·99	..	..	..	..	Aug. 21	1·12
		Oct. 16	Nov. 2	18	5·42	Oct. 19	Nov. 2	15	4·96	Oct. 29	1·03

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
SCOTLAND —(*con.*)				days	in.			days	in.		in.
Argyllshire.14	Mull (Gruline)	23.xii.29	Jan. 26	35	20·51	23.xii.29	Jan. 16	25	15·58	Jan. 10	1·68
		Aug. 1	Aug. 30	30	8·87	Aug. 16	Aug. 30	15	6·10	Aug. 21	1·42
		Oct. 3	Dec. 13	72	30·15	Oct. 4	Nov. 2	30	15·20	Oct. 17	1·87
		Dec. 15	Dec. 31	17	5·64	..	..	..	..	Dec. 26	1·25
,, ...14	Tiree (Cornaigmore School)	22.xii.29	Jan. 13	23	6·54	22.xii.29	Jan. 13	23	6·54	28.xii.29	·59
		June 19	July 3	15	2·90	..	..	..	..	June 23	·53
		Oct. 2	Oct. 30	29	6·80	Oct. 9	Oct. 24	16	4·80	Oct. 17	·89
		Dec. 17	Dec. 31	15	2·35	..	..	..	..	Dec. 28	·69
Perth 11	Aberfeldy (Dall Avon)	23.xii.29	Jan. 13	22	8·24	..	..	..	..	23.xii.29	1·33
		Oct. 7	Oct. 24	18	4·91	Oct. 10	Oct. 24	15	4·21	Oct. 17	·73
Aberdeen ..1	Balmoral Castle Gardens	May 6	May 21	16	1·23	..	..	..	..	May 7	·23
										Sept. 18	·80
		Sept. 17	Oct. 1	15	3·62	..	..	..	..	Sept. 20	
		Oct. 6	Oct. 30	25	4·28	..	..	..	..	Oct. 17	·89
Inverness ..3	Cluny Castle	23.xii.29	Jan. 13	22	6·63	23.xii.29	Jan. 13	22	6·63	Jan. 1	·68
										Oct. 11	·58
		Oct. 3	Nov. 3	32	6·57	Oct. 3	Oct. 17	15	3·49	Oct. 24	
,, ...17	Fort William (The Factory)	23.xii.29	Jan. 25	34	21·18	23.xii.29	Jan. 21	30	20·78	Jan. 8	1·49
		Aug. 6	Aug. 30	25	6·99	Aug. 16	Aug. 30	15	5·43	Aug. 18	1·21
		Oct. 3	Oct. 30	28	11·34	Oct. 4	Oct. 20	17	9·15	Oct. 10	1·41
,, ...18	Skye (Portree)	23.xii.29	Jan. 26	35	13·86	25.xii.29	Jan. 25	32	13·34	28.xii.29	1·01
		April 11	April 26	16	2·65	..	..	..	..	April 11	·71
		May 6	May 20	15	2·73	..	..	..	..	May 17	·99
		Aug. 7	Aug. 30	24	8·25	Aug. 16	Aug. 30	15	5·55	Aug. 18	1·44
		Oct. 3	Oct. 30	28	12·40	Oct. 3	Oct. 29	27	12·37	Oct. 19	1·26
		Nov. 1	Nov. 18	18	6·00	Nov. 1	Nov. 18	18	6·00	Nov. 7	1·13

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
SCOTLAND —(*con.*)				days	in.			days	in.		in.
Ross and Cromarty 8	Loch Torridon (Bendamph)....	25.xii.29	Jan. 29	36	18·04	25.xii.29	Jan. 28	35	18·02	28.xii.29	1·46
		Aug. 14	Aug. 29	16	6·58	Aug. 14	Aug. 29	16	6·58	Aug. 21	1·57
		Oct. 3	Oct. 30	28	10·84	Oct. 4	Oct. 30	27	10·81	Oct. 29	·83
,, ...10	Stornoway	23.xii.29	Jan. 26	35	8·98	25.xii.29	Jan. 13	20	7·43	Jan. 1	·95
		April 11	April 25	15	1·44	..	..	..	..	April 11	·49
		Aug. 16	Sept. 1	17	2·19	..	..	..	..	Aug. 18	·46
		Oct. 4	Oct. 31	28	7·91	Oct. 4	Oct. 20	17	6·01	Oct. 17	·78
		Nov. 2	Nov. 18	17	3·92	..	..	..	..	Nov. 14	·66
		Dec. 4	Dec. 31	28	5·24	..	..	..	..	Dec. 27	·69
Sutherland..1	Lairg.....	April 5	April 21	17	·93	..	..	..	..	April 13	·15
,, ...5	Loch More (Achfary).....	23.xii.29	Jan. 15	24	12·06	23.xii.29	Jan. 15	24	12·06	Jan. 1	1·41
		Mar. 7	Mar. 22	16	3·40	..	..	..	..	Mar. 19	·57
		April 7	April 25	19	2·96	..	..	..	..	April 11	·45
		May 6	May 20	15	4·68	..	..	..	..	May 18	1·41
		Aug. 7	Sept. 1	26	9·47	Aug. 8	Aug. 30	23	8·92	Aug. 21	1·46
		Oct. 3	Oct. 31	29	11·20	..	..	..	..	Oct. 6	1·24
		Nov. 2	Nov. 16	15	10·78	Nov. 2	Nov. 16	15	10·78	Nov. 13	1·92
		Dec. 8	Dec. 23	16	4·93	Dec. 8	Dec. 23	16	4·93	Dec. 18	·73
Caithness ..3	Thurso (Buckies).....	28.xii.29	Jan. 12	16	3·72	..	..	..	..	29.xii.29	·85
IRELAND											
Co. Cork ...6	Dunmanway (The Rectory)....	19.xii.29	Jan. 13	26	11·78	19.xii.29	Jan. 4	17	8·23	Jan. 10	1·40
		Oct. 10	Oct. 25	16	4·07	..	..	..	..	Oct. 19	·67
,, ...9	Mallow (Longueville)	22.xii.29	Jan. 13	23	6·83	..	..	..	..	24.xii.29	1·40
		Oct. 10	Nov. 5	27	4·97	..	..	..	..	Oct. 19	·61

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
IRELAND —(*con.*)				days	in.			days	in.		in.
Co. Kerry...3	Cahirciveen (Valentia Obsy.)...	19.xii.29	Jan. 13	26	9·88	19.xii.29	Jan. 13	26	9·88	Jan. 10	1·13
		July 31	Aug. 28	29	7·29	..	..	..	..	Aug. 17	1·31
		Oct. 10	Oct. 29	20	5·54	..	..	..	..	Oct. 19	1·09
		Dec. 4	Dec. 19	16	3·33	..	..	..	..	Dec. 15	·80
Co. Water- ford 3	Waterford (Brook Lodge).....	19.xii.29	Jan. 4	17	5·58	..	..	..	..	20.xii.29	1·06
Co. Tip- perary 1	Nenagh (Castle Lough).....	19.xii.29	Jan. 13	26	8·60	19.xii.29	Jan. 4	17	5·08	Jan. 10	1·42
		Oct. 11	Nov. 9	30	5·95	..	..	..	..	Oct. 22	·73
,, ...3	Cashel (Ballinamona).....	19.xii.29	Jan. 24	37	8·23	19.xii.29	Jan. 7	20	4·83	24.xii.29	·78
		Oct. 19	Nov. 7	20	3·53	..	..	..	..	Oct. 22	·57
Co. Limerick 2	Foynes (Coolnanes).....	19.xii.29	Jan. 13	26	9·97	19.xii.29	Jan. 13	26	9·97	Jan. 9	1·57
		Oct. 11	Nov. 4	25	6·07	Oct. 11	Oct. 27	17	4·56	Oct. 22	·82
Co. Wexford.4	Gorey (Courtown House).....	19.xii.29	Jan. 4	17	5·53	..	..	..	..	20.xii.29	1·21
		July 28	Aug. 13	17	2·73	..	..	..	..	Aug. 1	·90
Leix (Queen's Co.) 2	Abbey Leix (Blandsfort).....	19.xii.29	Jan. 13	26	7·17	..	..	..	..	Jan. 10	·78
		Oct. 10	Nov. 2	24	4·42	..	..	..	....	Oct. 17	·73
Co. Dublin..2	Dublin (Fitz William Square)...	July 25	Aug. 8	15	2·44	..	..	..	..	Aug. 1	·43
Co. Meath ..4	Kells (Headfort).....	July 25	Aug. 13	20	2·75	..	..	..	..	July 27	·40
		Aug. 16	Aug. 30	15	4·68	..	..	..	..	Aug. 18	·99
		Oct. 19	Nov. 2	15	3·57	..	..	..	..	Oct. 19	·80
Co. West- meath 1	Moate (Coolatore).....	19.xii.29	Jan. 13	26	4·62	..	..	..	..	28.xii.29	·68
		July 31	Aug. 15	16	2·30	..	..	..	..	Aug. 1	·51
		Oct. 10	Nov. 3	25	3·95	..	..	..	..	Oct. 19	·54
Co. Longford 2	Castle Forbes Gardens.....	19.xii.29	Jan. 13	26	6·56	..	..	..	..	28.xii.29	1·16
		Aug. 11	Aug. 28	18	4·20	..	..	..	..	Aug. 20	·73
		Oct. 10	Nov. 2	24	4·80	Oct. 10	Nov. 2	24	4·80	Oct. 31	·67
Co. Galway.3	Ballynahinch Castle.....	19.xii.29	Jan. 13	26	9·77	19.xii.29	Jan. 13	26	9·77	24.xii.29	1·26
		July 31	Aug. 28	29	9·92	..	..	..	..	Aug. 25	2·36
		Oct. 4	Nov. 10	38	12·60	Oct. 4	Nov. 4	32	11·36	Oct. 22	1·23
		Dec. 4	Dec. 20	17	6·47	Dec. 4	Dec. 19	16	6·45	Dec. 10	1·31

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

Table XI.—*Rain Spells and Wet Spells in* 1930—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted	Total Rain.	Began.	Ended.	Lasted	Total Rain.	Date.	Rain.
IRELAND —(*con.*)				days	in.			days	in.		in.
Co. Mayo ...**4**	Mallarany.....	19.xii.29	Jan. 13	26	10·35	19.xii.29	Jan. 13	26	10·35	28.xii.29	1·22
		Aug. 5	Aug. 28	24	9·08	..	..	..	..	Aug. 25	2·06
		Oct. 17	Nov. 8	23	8·08	Oct. 17	Nov. 3	18	6·38	Nov. 7	1·21
		Dec. 3	Dec. 30	28	8·42	Dec. 4	Dec. 19	16	5·83	Dec. 10	1·05
Co. Sligo ...**2**	Collooney (Markree Obsy.).....	19.xii.29	Jan. 13	26	6·76	19.xii.29	Jan. 12	25	6·74	28.xii.29	·95
		Oct. 2	Nov. 2	32	7·77	Oct. 2	Nov. 2	32	7·77	Oct. 7	·89
		Dec. 3	Dec. 17	15	3·37	..	..	..	..	Dec. 12	·85
Co. Cavan ..**1**	Belturbet (Cloverhill)	20.xii.29	Jan. 13	25	5·74	20.xii.29	Jan. 5	17	4·14	28.xii.29	1·05
		Aug. 6	Aug. 25	20	3·72	..	..	..	..	Aug. 17	·77
		Sept. 11	Sept. 25	15	2·69	..	..	..	..	Sept. 17	·64
		Oct. 2	Nov. 2	32	4·97	..	..	..	..	Oct. 31	·60
Co. Down ..**2**	Seaforde	19.xii.29	Jan. 8	21	5·43	..	..	..	..	28.xii.29	·83
		Aug. 1	Aug. 15	15	2·41	..	..	..	..	Aug. 1	·68
		Oct. 13	Oct. 29	17	3·64	..	..	..	..	Oct. 17	·89
Co. Antrim..**5**	Ballymena (Harryville).....	28.xii.29	Jan. 13	17	3·99	..	..	..	..	28.xii.29	·69
		Aug. 1	Aug. 29	29	7·69	Aug. 11	Aug. 25	15	5·11	Aug. 21	1·08
		Oct. 2	Oct. 17	16	4·00	..	..	..	..	Oct. 7	·84
		Oct. 19	Nov. 3	16	3·43	..	..	..	..	Oct. 24	·51
Co. Tyrone..**3**	Omagh (Edenfel)	*17.xii.29*	*Jan. 13*	*28*	*6·92*	19.xii.29	Jan. 12	25	6·83	*28.xii.29*	*·97*
		July 25	Aug. 29	36	8·38	..	..	..	..	Aug. 20	·70
		Oct. 17	Nov. 2	17	3·98	Oct. 17	Nov. 2	17	3·98	Oct. 17	·68
Co. Donegal.**3**	Milford (The Manse)	*22.xi.29*	*Jan. 13*	*53*	*11·21*	24.xii.29	Jan. 12	20	5·51	*28.xii.29*	*·94*
		June 18	July 3	16	2·82	..	..	..	..	June 23	·67
		Aug. 1	Aug. 21	21	5·73	..	..	..	..	Aug. 21	1·39
		Oct. 2	Nov. 2	32	7·70	..	..	..	..	Oct. 20	·67
,, ...**5**	Killybegs (Rockmount).....	24.xii.29	Jan. 12	20	7·95	24.xii.29	Jan. 12	20	7·95	28.xii.29	1·50
		July 26	Aug. 24	30	7·45	..	..	..	..	Aug. 18	·94
		Oct. 15	Nov. 2	19	6·98	Oct. 15	Nov. 2	19	6·98	Oct. 15	·83

* At least 15 days, each credited with ·01 inch or more.

† At least 15 days, each credited with ·04 inch or more.

5. DURATION OF RAINFALL IN 1930.

The duration of rainfall is obtained from measurements of the records of autographic gauges. On these records the amount of rain is measured vertically and the duration of the rainfall is measured horizontally in accordance with scales which are printed upon the charts before they are placed in position in the gauges. The pen of an autographic gauge writes a horizontal line on the record during such time as no rain is falling, and it writes a more or less sloping line whenever rain is passing into the receiver of the gauge.

The duration of rainfall discussed in this section is defined as the length of time during which rain is falling at a rate not less than 0·1 mm. per hour, *i.e.*, ·004 in. per hour. The tabulations at all the official stations are made according to this convention, which was first brought into general use in *British Rainfall*, 1920. It was adopted because during very light rainfall it was found to be almost impossible to decide upon the exact point on the record where the change from "no rain" to "rain" occurred. By taking a definite limiting slope of the trace as the criterion this difficulty is to a great extent avoided and it is found possible to obtain comparable measurements from different gauges and from different observers. The limit of 0·1 mm. (·004 in.) per hour is low enough to ensure that no fall of practical importance is excluded.

The list of stations reporting duration of rainfall for 1930 is given in Tables XII and XIII. These tables have been arranged in this volume so as to give information of the total duration of rainfall and of the mean rate of rainfall for the same stations at one opening. Additional records are included from Dover (Barton Road), Twickenham, Hayes, Greenford, Ickenham, Wealdstone, Edgware, Stanmore, Barnet, Burbage (to the south-west of Sheffield), Irlam (to the north-east of Warrington), Boghall (in the Pentland Hills) and Kirriemuir (Forfarshire). The record from Skipton is again included in the table. In the majority of cases the records are maintained by the local authorities and are mainly used in problems connected with the disposal of flood water. Seven additional records have been supplied by the Engineer, Middlesex County Council. The records at Barnet and Irlam are contributed by the respective Urban District Councils, that from Burbage is an additional record supplied by the Engineer of the Sheffield Water Works, that from Boghall is supplied by the Edinburgh and East

of Scotland College of Agriculture, and that from Kirriemuir by the Engineer, Dundee Water Works. The only private observer contributing a return for the first time is Mr. C. G. W. Lewis of Dover.

The hyetograph in use at Lympne Aerodrome was moved half a mile south and set up in a new enclosure on October 1st, 1930. Unfortunately the record from Glenedra Lodge in Co. Londonderry, terminated at the end of May, 1930.

The distribution of the stations in operation at the beginning of 1927 was shown by a map in *British Rainfall*, 1926, p. 36. Central Ireland and northern Scotland are still but sparsely represented, while records of duration from some of the very wet stations in central and northern Wales and the English Lake District would also be particularly valuable.

Many stations in the south-east of England recorded less than 15 hours of rainfall from June 1st to July 10th. At Porton, to the south-east of Salisbury Plain, the duration of rainfall during these 40 days was 6·6 hours, and at Poole the duration during the 47 days, May 27th to July 12th, was only 9·0 hours. Further north the most striking dry period, judged from the duration records, occurred in February. At Nottingham there were only 5·7 hours of rain during the 35 days February 2nd to March 8th, at Lancaster 5·0 hours during the 32 days February 1st to March 4th, and at Kilmarnock 4·4 hours during the 31 days February 1st to March 3rd, and at Glenleven (Blackwater Dam) 9·4 hours during the 32 days February 1st to March 4th. The small duration of rainfall at Glenleven is perhaps the most striking, for the average annual rainfall at that station is as much as 86 inches. On the other hand among the most striking wet periods, judged from the duration records, mention may be made of January 1st to 14th at Cray Reservoir, in the Black Mountains, with 152·5 hours of rain and January 1st to 10th at Glenleven (Blackwater Dam) with 127·3 hours.

Table XII sets out the duration of rainfall expressed in hours at 81 stations in the British Isles, for each month and for the whole year of 1930. In this table the durations at Kew Observatory, Eskdalemuir Observatory, Aberdeen Observatory and Valentia Observatory are expressed for monthly periods commencing both at midnight and at 7 a.m. The station with the highest aggregate duration for the year is Glenleven (Blackwater Dam) with a duration of 1,507 hours. This period is equivalent to about 63 days, or more than one-sixth of the total duration possible. Other stations with high aggregates were Cray Reservoir (Brecon) with 1,392 hours and Eskdalemuir (Dumfries) with 1,189 hours. The smallest aggregates for the year included those at or near London (369 hours at

Eltham, 378 hours at Fulham, and 408 hours at Leyton); at Cardington (Bedford) 405 hours and Felixstowe 407 hours. Nottingham and Sutton Bonington, which are usually included among the the stations with the smallest duration of rainfall, recorded 481 and 537 hours respectively. In Section 10 it is shown that the rainfall of 1930 in this district was about 135 per cent. of the average. The large totals of rainfall and of duration of rainfall recorded in Nottinghamshire are therefore accounted for by more frequent rains of about the usual intensity.

The largest monthly totals, given in the table, occurred in January, viz.: 231 hours at Glenleven (Blackwater Dam) and 229 hours at Cray Reservoir. The duration of rainfall was less than 10 hours in either February or June at a number of stations, but no station recorded less than 10 hours in both months.

Table XIII sets out the mean monthly and annual values of rate of rainfall at each of the stations of Table XII. The values are obtained by dividing the total fall for the month or year by the duration as given in the preceding table. Stations with high mean rates of rainfall for the year are Earby Sewage Works with ·074 inch per hour; Dover and Swansea with ·072 inch per hour. The stations with the lowest mean rates of fall are Lerwick Observatory with ·040 inch per hour, and Armagh Observatory, Leafield Wireless Station and Cranwell Aerodrome with ·045 inch per hour. The table shows the usual feature of intense falls in the summer months, especially in June, July and August. The mean rate per hour reached ·200 inch at four stations, in June, viz.: at St. Pancras (Camden Square), Kingston (Sewage Works) Ickenham and Worksop (Hodsock Priory). The duration of rainfall at these stations was between 6 and 16 hours. The mean rate of rainfall reached ·100 inch per hour in only a few months. This occurred in summer months at stations in the southern half of England.

Table XII.—*Duration of Rainfall at* 81 *Stations during* 1930. (*Monthly and Annual values.*)

For the purposes of this table the month commences either at 7 *a.m. or* 9 *a.m. G.M.T. on the first day of the month and ends at the same hour on the first day of the following month.*

County and River Division.	Station.	Pattern of Gauge.	H't. above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
London 1	Eltham (High Street).....	Hyeto	245	47	15	30	23	48	10	21	28	44	15	62	26	369
,, ...2	Fulham (Bishops Park).....	Hyeto	15	52	10	28	27	48	10	27	33	36	17	61	29	378
,, ...2	St. Pancras (Camden Square).	Hyeto	111	60	18	29	39	57	16	30	37	64	27	69	33	479
Surrey 4	Croydon Aerodrome.....	Nat. Syphon	217	85	19	35	41	56	10	44	37	49	34	78	41	529
,, ...5	Leatherhead (Dunard Lodge)	Nat. Syphon	233	85	18	32	41	50	8	40	35	48	25	72	49	503
,, ...5	Kingston (Sewage Works)....	Nat. Syphon	25	64	11	35	35	62	8	39	30	63	23	77	46	493
,, ...5	Richmond (Kew Observatory)	Beckley	20	64	12	32	36	58	9	29	36	44	20	67	34	441
† ,, ...5	,, ,, ,,	,,	20	65	12	32	36	57	10	29	36	44	19	68	34	442
Kent 1	Dover (Waterloo Crescent)...	Hyeto	22	40	42	43	30	45	16	27	27	41	27	66	42	446
,, ...1	Dover (Barton Road).....	Nat. Syphon	55	62	30	40	35	55	16	42	31	54	37	74	58	534
,, ...2	Lympne Aerodrome.....	Hyeto	346	54	30	35	26	51	16	39	32	48	40	77	54	502
,, ...2	Ramsgate (East Cliffe).....	Nat. Syphon	81	49	23	39	42	51	21	50	26	62	35	64	50	512
,, ...2	Manston Aerodrome.....	Nat. Syphon	150	55	46	38	35	57	19	57	29	63	35	..	..	..
,, ...4	Strood Waterworks.....	Nat. Syphon	112	46	23	27	21	41	12	40	28	41	20	63	35	397
Sussex 5	Hellingly (Burlow).....	Hyeto	209	71	43	41	37	58	20	43	36	(46)	47	89	56	587
Hampshire ..4	Calshot (Seaplane Station)...	Nat. Syphon	9	111	24	37	46	47	10	30	35	47	45	78	70	580
,, ..5	Winchester (Worthy Down)..	Nat. Syphon	276	113	17	40	69	50	10	42	46	65	36	73	69	630
,, ..6	Petersfield (Stoner Hill).....	Hyeto	750	128	28	34	64	59	7	44	51	61	53	89	79	697
,, ..8	South Farnborough (R.A.E.).	Hyeto	237	100	21	31	51	59	5	49	37	55	26	86	59	579
Middlesex ...1	Twickenham Sewage Works..	Hyeto	38	62	13	24	29	41	9	19	26	36	14	..	25	..
,, ...1	Hayes Sewage Works.....	Hyeto	124	..	10	20	32	34	8	..	29	34	15	49	24	..
,, ...1	Greenford.....	Hyeto	61	62	16	35	49	52	12	30	32	38	19	60	29	434
,, ...1	Ickenham Sewage Works....	Hyeto	109	51	13	..	36	50	6	20	33	36	13	50	28	..
,, ...1	Wealdstone Sewage Works...	Hyeto	155	75	14	31	44	50	11	20	32	35	13	58	27	410
,, ...1	Edgware (M.C.C. Depot).....	Hyeto	179	73	18	33	44	36	11	27	35	36	18	64	28	423
,, ...1	Stanmore.....	Hyeto	435	66	14	30	40	42	8	26	34	42	26	59	31	418
,, ...2	Palmers Gn. (Broomfield Park)	Casella	138	53	20	31	41	49	12	30	41	49	24	69	33	452
Herts. 2	Barnet Sewage Works.....	Hyeto	297	59	24	30	51	48	10	24	30	42	19	60	25	422
,, ...2	Harpenden (Rothamsted)....	Nat. Syphon	420	69	16	37	47	51	7	31	27	48	22	63	42	460

† Values are for periods ending 24h. on last day of month.

Table XIII.—*Mean Rate of Rainfall at* 81 *Stations during* 1930. (*Monthly and Annual values.*)

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
London.....1	Eltham (High Street).....	·043	·057	·055	·052	·077	·063	·085	·133	·110	·065	·065	·058	·068
,, ...2	Fulham (Bishops Park).....	·048	·055	·052	·045	·064	·147	·084	·074	·087	·058	·062	·055	·065
,, ...2	St. Pancras (Camden Square).....	·042	·056	·054	·048	·047	·200	·067	·079	·056	·047	·062	·059	·060
Surrey 4	Croydon Aerodrome.....	·039	·036	·050	·034	·059	·061	·047	·080	·074	·034	·054	·053	·052
,, ...5	Leatherhead (Dunard Lodge).....	·048	·054	·052	·040	·047	·062	·059	·108	·082	·044	·065	·051	·059
,, ...5	Kingston (Sewage Works).....	·044	·054	·049	·040	·047	·206	·041	·087	·041	·038	·051	·036	·049
,, ...5	Richmond (Kew Observatory)....	·042	·047	·046	·052	·060	·139	·064	·080	·058	·055	·057	·053	·057
,, ...5	,, ,, ,, ...	·042	·047	·046	·052	·060	·133	·064	·080	·058	·057	·056	·053	·057
Kent.....1	Dover (Waterloo Crescent).....	·062	·045	·055	·064	·073	·078	·123	·122	·081	·059	·087	·061	·074
,, ...1	Dover (Barton Road).....	·048	·068	·061	·057	·064	·069	·100	·134	·076	·049	·085	·061	·072
,, ...2	Lympne Aerodrome.....	·047	·039	·050	·058	·084	·061	·094	·098	·081	·040	·071	·056	·066
,, ...2	Ramsgate (East Cliffe).....	·038	·055	·046	·034	·059	·063	·052	·090	·058	·031	·059	·034	·050
,, ...2	Manston Aerodrome.....	·039	·039	·051	·039	·045	·040	·046	·098	·067	·035	..	..	..
,, ...4	Strood Waterworks.....	·050	·038	·055	·068	·087	·062	·064	·110	·077	·052	·065	·059	·066
Sussex 5	Hellingly (Burlow).....	·056	·038	·042	·047	·043	·050	·067	·100	·065	·053	·067	·056	·057
Hampshire.....4	Calshot (Seaplane Station).....	·035	·035	·042	·051	·032	·060	·063	·086	·067	·055	·067	·044	·051
,, ...5	Winchester (Worthy Down).....	·043	·045	·033	·033	·035	·039	·043	·079	·049	·046	·076	·050	·049
,, ...6	Petersfield (Stoner Hill).....	·054	·040	·034	·049	·044	·080	·067	·109	·070	·051	·080	·059	·061
,, ...8	South Farnborough (R.A.E.).....	·040	·037	·040	·038	·037	·064	·044	·087	·056	·049	·058	·042	·048
Middlesex 1	Twickenham Sewage Works.....	·041	·047	·052	·052	·061	·112	·080	·105	·070	·071	..	·065	..
,, ...1	Hayes Sewage Works.....	..	·049	·059	·052	·073	·191	..	·094	·074	·065	·075	·074	..
,, ...1	Greenford	·045	·043	·039	·039	·058	·118	·065	·094	·082	·055	·072	·076	·062
,, ...1	Ickenham Sewage Works.....	·050	·038	..	·042	·050	·225	·088	·079	·068	·071	·074	·061	..
,, ...1	Wealdstone Sewage Works.....	·036	·043	·038	·038	·063	·174	·101	·089	·078	·076	·065	·074	·063
,, ...1	Edgware (M.C.C. Depot).....	·036	·034	·043	·036	·079	·172	·072	·100	·084	·072	·063	·078	·064
,, ...1	Stanmore.....	·043	·044	·041	·041	·060	·150	·073	·104	·073	·040	·062	·077	·062
,, ...2	Palmers Green (Broomfield Park)..	·046	·054	·050	·045	·059	·097	·069	·067	·068	·055	·062	·072	·060
Herts.....2	Barnet Sewage Works.....	·041	·046	·062	·048	·055	·098	·084	·115	·059	·064	·066	·090	·064
,, ...2	Harpenden (Rothamsted).....	·045	·047	·038	·046	·054	·124	·069	·094	·067	·049	·079	·065	·061

† Values are for periods ending 24h. on last day of month.

Table XII.—*Duration of Rainfall at* 81 *Stations during* 1930—(*con.*).

County and River Division.	Station.	Pattern of Gauge.	H't. above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
Oxon 2	Leafield (Wireless Station)....	Hyeto	612	98	15	40	74	48	14	60	47	66	47	75	77	661
,, ...3	Upper Heyford.....	Nat. Syphon	408	95	16	34	61	50	11	45	37	53	27	62	64	555
Bedford.....3	Cardington.....	Nat. Syphon	137	48	14	39	38	45	8	27	30	39	17	59	41	405
Essex.....1	Leyton Sewage Works.....	Hyeto	22	57	15	30	35	52	15	18	33	45	19	65	24	408
Suffolk.....2	Ipswich (Rookwood, Copdock)	Casella	164	44	18	34	32	41	13	47	31	65	24	62	46	457
,, ...3	Felixstowe Aerodrome.....	Nat. Syphon	15	44	31	46	27	37	15	36	22	49	15	52	33	407
Wilts.....3	Porton (W.D. Ex. Station)...	Hyeto	363	106	33	27	59	36	6	36	41	53	33	65	67	562
Dorset 3	Poole.....	Hyeto	8	78	17	22	44	39	7	27	31	43	43	70	72	493
S. Devon....2	Plymouth (Freedom Park)...	Hyeto	208	102	38	39	70	50	15	35	55	65	78	97	87	731
Cornwall 2	Falmouth Observatory	Beckley	167	138	46	60	83	54	28	34	63	73	91	108	97	865
Hereford 1	Ross (County Observatory)...	Hyeto	224	95	15	50	59	25	8	31	38	39	42	47	59	508
Stafford.....3	West Bromwich.....	Hyeto	543	80	15	45	37	36	11	56	41	49	39	50	62	521
,, ...5	Ashbourne (Mayfield House)..	Casella	374	100	22	79	72	57	31	84	66	80	93	81	80	845
Lincoln 3	Cranwell Aerodrome.....	Nat. Syphon	242	67	24	58	70	46	23	60	34	82	38	59	49	610
Nottingham..2	Sutton Bonington (Agric. Coll.)	Hyeto	159	68	13	44	49	48	18	59	38	58	53	51	38	537
,, 5	Nottingham (Trent Lane)....	Fernley	83	63	7	45	47	38	17	55	42	48	36	49	34	481
,, 5	Worksop (Hodsock Priory)...	Halliwell	56	67	15	52	54	29	12	57	40	76	42	64	46	554
Derby 6	Burbage (Lower Burbage)....	Hyeto	925	88	18	85	68	33	16	71	47	74	61	76	71	708
Cheshire 3	Birkenhead (Bidston Obs.)...	Nat. Syphon	198	87	11	91	83	30	23	79	76	54	72	75	105	786
S. Lancs.....2	Irlam Sewage Works.....	Nat. Syphon	40	..	..	..	..	..	42	89	93	47	69	70	81	..
,, ...2	Liverpool (Monument Place)..	Casella	129	92	7	94	91	36	31	73	78	49	74	65	93	783
,, ...3	Bolton (Queen's Park).....	Fernley	342	103	13	93	55	54	32	93	106	59	114	96	101	919
C. Lancs.....1	Nelson (Walton Lane).....	Hyeto	540	133	13	73	76	53	35	78	86	52	84	76	86	845
,, ...2	Leyland (Worden Hall).....	Fernley	125	119	6	76	64	40	39	89	93	54	94	79	89	892
,, ...3	Southport (Hesketh Park)....	Fernley	39	96	10	69	67	29	26	62	70	48	72	60	87	696
N. Lancs. ...4	Lancaster (Greg Observatory).	Beckley	312	127	5	69	43	34	31	54	85	53	93	67	90	751
W.R. Yorks..7	Sheffield W.W. (Rivelin).....	Hyeto	564	92	17	68	68	33	15	70	46	78	61	63	64	675
,, ..7	Rotherham (Aldwarke Sewage Works)	Hyeto	73	..	49	79	67	34	13	..	..	..	..	59	..	..

Table XIII.—*Mean Rate of Rainfall at* 81 *Stations during* 1930—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
Oxon 2	Leafield (Wireless Station).....	·041	·029	·043	·039	·033	·075	·055	·054	·050	·033	·050	·045	·045
,, ...3	Upper Heyford	·033	·040	·045	·042	·034	·088	·070	·070	·056	·047	·058	·049	·049
Bedford 3	Cardington	·047	·034	·043	·042	·051	·037	·085	·074	·058	·049	·053	·054	·053
Essex 1	Leyton Sewage Works.....	·042	·064	·049	·049	·053	·167	·101	·101	·056	·046	·062	·080	·064
Suffolk 2	Ipswich (Rookwood, Copdock)....	·044	·034	·042	·060	·058	·050	·100	·085	·075	·034	·054	·049	·060
,, ...3	Felixstowe Aerodrome.....	·032	·033	·032	·047	·041	·080	·086	·070	·080	·047	·058	·050	·054
Wilts 3	Porton (W.D. Ex. Station).....	·038	·038	·048	·041	·035	·101	·064	·082	·062	·038	·072	·048	·052
Dorset 3	Poole	·050	·043	·046	·044	·052	·056	·054	·098	·076	·044	·078	·054	·059
S. Devon 2	Plymouth (Freedom Park)	·068	·066	·075	·049	·043	·043	·065	·071	·081	·058	·079	·060	·065
Cornwall.....2	Falmouth Observatory.....	·056	·053	·058	·034	·044	·022	·061	·086	·079	·054	·069	·052	·057
Hereford 1	Ross (County Observatory)	·059	·054	·052	·048	·055	·072	·092	·083	·089	·059	·075	·056	·064
Stafford.....3	West Bromwich.....	·068	·044	·048	·073	·059	·078	·078	·086	·073	·070	·068	·045	·066
,, ...5	Ashbourne (Mayfield House).....	·043	·031	·037	·042	·042	·083	·074	·048	·050	·053	·049	·043	·049
Lincoln.....3	Cranwell Aerodrome	·039	·021	·038	·045	·039	·040	·059	·064	·053	·042	·052	·037	·045
Nottingham.....2	Sutton Bonington (Agric. College)..	·043	·045	·056	·064	·038	·084	·084	·097	·062	·045	·053	·044	·058
,, ...5	Nottingham (Trent Lane).....	·049	·074	·051	·069	·056	·101	·093	·070	·065	·060	·058	·049	·064
,, ...5	Worksop (Hodsock Priory)	·047	·049	·043	·052	·042	·200	·103	·074	·049	·043	·049	·040	·058
Derby 6	Burbage (Lower Burbage).....	·067	·061	·052	·053	·051	·110	·086	·067	·065	·074	·052	·049	·063
Cheshire 3	Birkenhead (Bidston Observatory).	·047	·017	·032	·035	·030	·076	·059	·068	·048	·057	·051	·037	·047
S. Lancs.....2	Irlam Sewage Works	..	..	..	..	..	·062	·056	·061	·068	·072	·061	·041	..
,, ...2	Liverpool (Monument Place).....	·054	·032	·032	·032	·028	·061	·079	·076	·059	·059	·072	·047	·054
,, ...3	Bolton (Queen's Park)	·052	·026	·036	·044	·041	·087	·066	·074	·064	·057	·067	·048	·057
C. Lancs.....1	Nelson (Walton Lane).....	·055	·047	·037	·046	·058	·069	·073	·078	·070	·084	·078	·044	·062
,, ...2	Leyland (Worden Hall)	·049	·041	·038	·031	·040	·043	·054	·068	·043	·064	·072	·044	·049
,, ...3	Southport (Hesketh Park)	·051	·033	·045	·041	·034	·054	·056	·084	·049	·076	·080	·047	·057
N. Lancs.....4	Lancaster (Greg Observatory).....	·055	·054	·047	·041	·037	·073	·071	·075	·049	·083	·074	·051	·061
W.R. Yorks.....7	Sheffield W.W. (Rivelin).....	·066	·069	·053	·050	·067	·101	·084	·067	·078	·069	·060	·057	·066
,, ...7	Rotherham (Aldwarke Sew. Works)	..	·016	·031	·043	·042	·036	..	..	..	..	·050	..	..

Table XII.—*Duration of Rainfall at* 81 *Stations during* 1930—(*con.*).

County and River Division.	Station.	Pattern of Gauge.	H't. above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
W.R. Yorks. .9	Haworth (Lower Laithe Res.).	Hyeto	771	125	27	73	90	56	35	77	79	87	112	105	95	961
,, ..9	Earby (Sewage Works).....	Hyeto	426	108	8	46	56	16	29	43	69	35	54	95	50	609
,, ..9	Skipton (Town Hall).....	Hyeto	368	115	14	49	67	47	40	84	79	55	83	78	77	788
N.R. Yorks..2	Felixkirk (Mt. St. John).....	Halliwell	542	91	39	73	98	50	27	103	62	83	59	68	82	835
Glamorgan ..3	Swansea (Victoria Park).....	Hyeto	28	120	17	45	57	50	32	49	83	83	103	77	109	825
,, ..7	Cardiff (Penylan).....	Nat. Syphon	205	117	19	54	80	50	14	34	77	71	97	76	89	778
Brecon.....7	Cray Reservoir.....	Halliwell	1044	229	22	84	92	79	92	114	136	102	146	131	165	1392
Flint 1	Sealand Aerodrome.....	Hyeto	17	84	20	91	78	34	17	76	55	54	63	56	88	716
Anglesey	Holyhead (Salt Island).....	Hyeto	26	117	15	79	74	42	31	45	90	56	84	59	91	783
Dumfries....5	Eskdalemuir Observatory....	Beckley	794	197	25	120	61	57	43	82	130	81	170	117	106	1189
† ,, ...5	,, ,,	,,	794	199	26	116	65	57	43	82	130	80	165	123	106	1192
Midlothian ..4	Boghall (Col. of Agriculture)..	Hyeto	646	125	15	81	39	27	36	59	82	78	62	85	44	733
Berwick.....3	Swinton House	Hyeto	200	50	47	52	34	19	23	54	65	80	48	69	53	594
Ayr 3	Kilmarnock (Kay Park).....	‡	132	122	4	53	31	31	39	29	85	46	99	98	75	712
Renfrew 2	Renfrew Aerodrome.....	Hyeto	37	139	8	83	37	35	43	55	92	58	127	96	87	860
,, ...3	Greenock (Prospect Hill).....	Hyeto	200	139	10	85	45	35	50	45	96	58	150	117	106	936
Argyll 4	Glenleven (Blackwater Dam)..	Hyeto	1072	231	9	117	80	95	94	54	174	81	218	176	178	1507
Fife 3	Leuchars (Training Base)....	Nat. Syphon	30	48	37	59	53	30	39	51	94	71	61	80	70	693
Angus 1	Kirriemuir (Lintrathen).....	Nat. Syphon	700	96	53	62	61	27	34	56	103	91	71	89	87	830
Aberdeen ...2	Aberdeen (King's College)....	Beckley	48	42	36	43	75	27	30	32	85	82	66	83	76	677
† ,, ...2	,, ,, ,,	,,	48	42	36	43	75	27	27	34	85	83	66	82	77	377
Shetland 3	Lerwick Observatory	Dines	269	109	38	92	68	31	64	47	74	75	105	135	154	992
Cork.....7	Cork (University College)....	Hyeto	64	101	19	112	53	49	39	38	106	51	76	69	81	794
Kerry.....3	Valentia Observatory.....	Beckley	42	134	17	103	61	61	50	62	120	67	100	74	114	963
† ,, ...3	,, ,, ...	,,	42	137	17	100	65	60	49	59	124	67	100	74	114	966
Armagh.....5	Armagh Observatory	Beckley	209	100	22	64	43	50	28	67	104	48	116	67	70	779
Antrim 5	Aldergrove Aerodrome.....	Nat. Syphon	238	83	27	67	47	39	36	73	118	52	83	70	67	762
Londonderry 5	Glenedra Lodge	Hyeto	950	163	51	105	94	65	..	..	..	..	..	..	..	..

† Values are for periods ending 24h. on last day of month.

‡ Private construction.

Table XIII.—*Mean Rate of Rainfall at* 81 *Stations during* 1930—(*con.*).

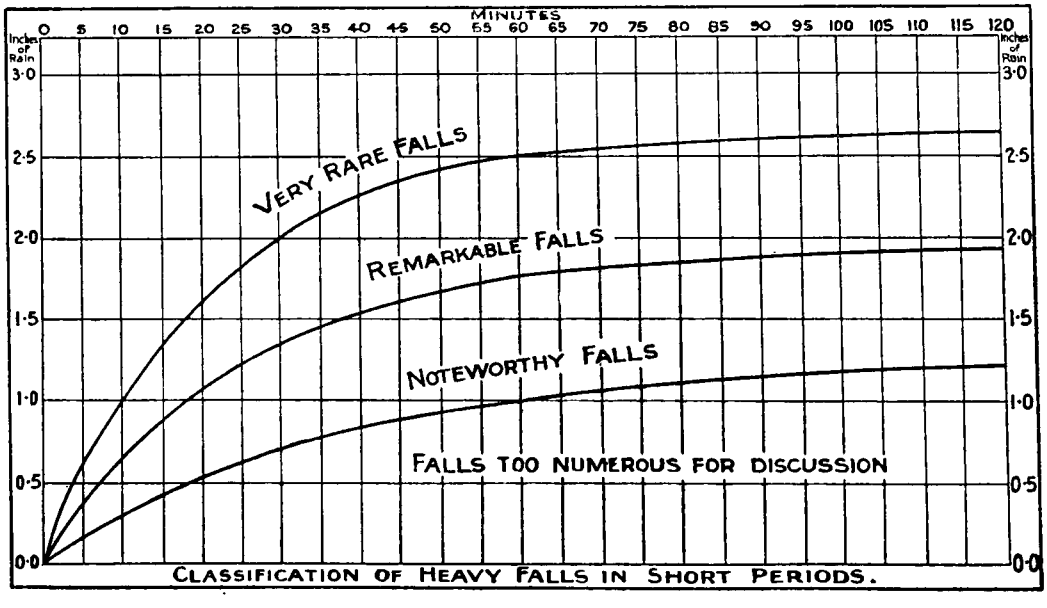
County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
W.R. Yorks. 9	Haworth (Lower Laithe Res.).....	·066	·041	·045	·045	·041	·068	·085	·081	·053	·059	·070	·050	·060
,, ...9	Earby (Sewage Works).....	·065	·077	·063	·045	·102	·075	·152	·066	·079	·096	·059	·062	·074
,, ...9	Skipton (Town Hall)	·047	·039	·040	·041	·033	·041	·087	·051	·045	·049	·055	·037	·049
N.R. Yorks.....2	Felixkirk (Mt. St. John).....	·044	·034	·038	·043	·027	·076	·067	·047	·053	·041	·054	·034	·046
Glamorgan.....3	Swansea (Victoria Park).....	·066	·046	·066	·051	·051	·074	·092	·083	·085	·076	·075	·069	·072
,, ...7	Cardiff (Penylan).....	·056	·038	·050	·040	·033	·044	·094	·068	·071	·053	·073	·051	·057
Brecon 7	Cray Reservoir.....	·064	·029	·060	·049	·046	·037	·073	·061	·071	·070	·065	·055	·060
Flint 1	Sealand Aerodrome.....	·043	·017	·038	·030	·037	·067	·062	·066	·054	·063	·058	·043	·048
Anglesey	Holyhead (Salt Island).....	·050	·030	·047	·029	·030	·051	·058	·054	·056	·073	·079	·056	·053
Dumfries 5	Eskdalemuir Observatory.....	·055	·029	·033	·038	·054	·098	·068	·070	·052	·069	·059	·051	·057
† ,, ...5	,, ,,	·054	·030	·034	·036	·054	·098	·068	·070	·053	·070	·058	·051	·057
Midlothian.....4	Boghall (Col. of Agriculture)	·030	·035	·032	·027	·052	·047	·061	·063	·068	·054	·059	·039	·048
Berwick 3	Swinton House	·030	·031	·046	·045	·040	·057	·058	·056	·043	·056	·051	·034	·046
Ayr 3	Kilmarnock (Kay Park).....	·042	·043	·045	·052	·049	·084	·095	·065	·057	·065	·049	·052	·057
Renfrew 2	Renfrew Aerodrome	·040	·030	·037	·031	·046	·063	·081	·052	·061	·047	·052	·047	·049
,, ...3	Greenock (Prospect Hill).....	·076	·070	·051	·057	·084	·073	·067	·071	·079	·068	·075	·066	·069
Argyll 4	Glenleven (Blackwater Dam).....	·073	·054	·044	·041	·063	·069	·052	·061	·085	·071	·065	·057	·063
Fife 3	Leuchars (Training Base)	·035	·035	·029	·030	·035	·038	·045	·081	·066	·042	·043	·037	·046
Angus.....1	Kirriemuir (Lintrathen).....	·038	·023	·020	·037	·074	·060	·075	·066	·047	·058	·040	·063	·049
Aberdeen 2	Aberdeen (King's College).....	·044	·031	·031	·041	·037	·074	·044	·070	·055	·046	·043	·052	·049
† ,, ...2	,, ,, ,, ...	·044	·031	·031	·041	·037	·065	·054	·070	·055	·046	·043	·052	·049
Shetland.....3	Lerwick Observatory.....	·050	·038	·029	·029	·049	·041	·063	·056	·040	·047	·033	·031	·040
Cork 7	Cork (University College)	·070	·056	·062	·039	·034	·055	·073	·050	·088	·067	·076	·049	·060
Kerry 3	Valentia Observatory	·082	·068	·063	·050	·050	·074	·066	·067	·071	·075	·085	·055	·068
† ,, ...3	,, ,, ...	·081	·068	·064	·050	·050	·073	·069	·065	·071	·075	·086	·055	·068
Armagh 5	Armagh Observatory	·040	·039	·034	·035	·031	·053	·048	·056	·063	·046	·046	·037	·045
Antrim 5	Aldergrove Aerodrome	·049	·039	·027	·054	·039	·062	·050	·050	·070	·058	·048	·047	·050
Londonderry....5	Glenedra Lodge	·034	·035	·035	·037	·036	..	..	..	..	..	..	..	..

† Values are for periods ending 24h. on last day of month.

6. HEAVY FALLS IN SHORT PERIODS IN 1930.

Heavy falls of rain in short periods are of considerable economic importance, for they are frequently of such intensity as to cause extensive flooding, often accompanied by much surface erosion and structural damage to property. Considerable damage may occur as a result of the accumulation of flood water below the area of heaviest rainfall. The amount of the damage depends on a number of other factors, such as the shape of the catchment area, the nature of the ground and vegetation, whether the water finally flows into the river or sea at high or low tide and the relative positions of the towns. In towns the floods may be aggravated by the failure of the drainage system to cope with the demands made upon it.

Since 1908, this section of *British Rainfall* has contained a classification of intense falls into three categories designated " worthy of notice," " remarkable," and " very rare." The classification has been effected by reference to a diagram of which a copy is reproduced. This diagram indicates by continuous curved lines the upper and lower limits of rainfall which must fall in stated times in order that the fall may be admitted into one of the three categories.



CLASSIFICATION OF HEAVY FALLS IN SHORT PERIODS.

The diagram was prepared almost exclusively from eye observa-

tions of rainfall duration and from corresponding measurements of rainfall in ordinary rain-gauges.

On pp. 45, 46 of *British Rainfall*, 1926, it was pointed out that the frequency of intense falls above the curve denoting the limit of noteworthy falls is in actual fact much greater for small intervals of time (*i.e.*, the left-hand side of the diagram) than for larger intervals (the right-hand side of the diagram). On this account, the data of Table XV have been divided into two sections, one giving results from eye observations, which are properly comparable with the diagram, and the other giving results from autographic records, which are not truly comparable with the diagram for falls of short duration.

A complete list of the recorded falls of " very rare " intensity of one hour or less is given in Table XIV, where readings of ordinary as well as of autographic gauges are included. There are no entries for 1930, the last fall of very rare intensity of one hour or less occurring on September 23rd, 1927.

In Table XV particulars are given of falls recorded in 1930 which reached at least the intensity " worthy of notice." Unlike Table XIV, falls of longer duration than one hour are included, the upper limit being two hours. Not more than one entry is made for the same shower for any station. The entry gives the largest amount recorded with a mean intensity " worthy of notice," " remarkable," or " very rare," as the case may be, an entry at the higher rate being in general preferred. Intense falls of less duration than five minutes are not included in the table as in previous years, since in such cases the error is likely to be relatively large and such falls are not usually of practical importance.

Owing to the large number of intense falls during 1930, 24 entries which would usually have been included are omitted from Table XV(*b*). These are intense falls which are given in the first column of Table XVI (*i.e.*, ·20 in., in 6 mins. or less) and for which no measurements are available of larger amounts in specified times. The entries omitted are, therefore, intense falls of ·20 in., in 6 mins. or less, which are relatively insignificant. All the entries are included in the classification on page 46.

In accordance with practice the geographical distribution of the heavy falls of Table XV (including the 24 entries which were omitted to save space) is given in the following summary. The analysis probably separates the areas of more frequent and intense falls from those relatively immune, although it cannot be expected to indicate the actual relative frequency of intense falls in each area.

Number of Exceptional Rains of Two Hours' Duration or less.

		England and Wales.							British Isles.	Per cent. of records received.
		S.E.	S.W.	N.E.	N.W.	Total.	Scotland.	Ireland.		
Average 1868–1930		16·3	7·6	4·5	2·6	31·0	2·3	1·6	35·0	1·0
1930	(*a*) ..	17	7	11	8	42	3	2	48	0·9
	(*b*) ..	20	1	5	5	31	8	4	43	0·8
	Sums ..	37	8	16	13	73	11	6	91	1·7

(*a*) Observations made without autographic rain-gauges.
(*b*) Readings of autographic gauges.

In making the comparison of the two sets of figures with the average values it should be remembered that since 1868 the number of observing stations has steadily increased, while the number of autographic rain-gauges has also increased more especially of recent years. A fairly good indication of the frequency of intense falls in 1930, in relation to the average, is probably provided by comparing the number of observations made without autographic rain-gauges with the average. This indicates that intense falls in short periods in 1930 were more frequent than usual.

Table XIV.—*Rainfalls of Very Rare Intensity lasting for One Hour or less.*

Year.	Date.	Div.	Station.	Amount.	Duration	Rate per Hour
				in.	H. M.	in.
1912	May 8	XV	Alexandria	·26	0 1½	10·40
1888	Mar. 24	XI	Chepstow, Shirenewton Hall...	·33	0 2	9·90
1917	July 14	IV	Norwich, Ipswich Road.....	·47	0 2½	11·28
1893	Aug. 10	VIII	Preston, Corporation Offices....	1·25?	0 5?	15·00?
1893	June 14	XI	Chepstow, Shirenewton Hall ...	·62	0 5	7·44
1925	May 10	II	Godalming, Charterhouse.....	·60	0 5	7·20
1906	Aug. 2	II	Guildford, Piccard's Rough.....	·89	0 8	6·68
1892	July 3	VIII	Bolton, The Park	1·00?	0 9?	6·67?
1927	Sept. 23	V	Chagford (Dartmoor S'torium)..	1·30	0 10	7·80
1902	May 30	III	Cambridge, Sydney Street.....	1·10	0 10	6·60
1878	June 23	I	St. Pancras, Camden Square...	1·04	0 10	6·24
1912	July 21	VII	Wirksworth, Manor House.....	1·00	0 10	6·00
1918	July 16	II	Purley, Oakwood Avenue	1·10?	0 11	6·00?
1914	Aug. 14	XI	Guernsey, St. Martin's Road...	1·50	0 15	6·00
1878	June 23	I	St. Pancras, Camden Square...	1·43	0 15	5·72
1927	July 11	I	Balham High Road.....	1·50	0 18	5·00
1875	Aug. 7	II	Canterbury, Harbledown.....	2·12	0 20	6·36
1878	June 23	I	St. Pancras, Camden Square...	1·82	0 20	5·46
1897	June 24	III	Luton Pumping Station.....	1·65	0 20	4·95
1920	May 29	VIII	Leyland, Worden Hall.....	1·65	0 20	4·95
1878	June 23	I	St. Pancras, Camden Square...	2·30	0 28	4·93
1880	July 22	XI	Cowbridge, Ash Hall.....	2·90	0 30	5·80
1915	July 4	XI	Abergavenny, The Chain.....	2·20	0 30	4·40
1918	July 17	I	Shad Thames Pumping Station.	2·07	0 30	4·14
1895	June 27	IX	Middleton-in-the-Wolds	2·00	0 30	4·00
1902	Sept. 10	II	Surbiton, Vronvelin.....	2·00	0 30	4·00
1920	May 25	IV	Hatfield, Broad Oak, Barrington	2·79	0 45	3·72
1904	July 27	II	Cooling, Broomy Farm.....	2·66	0 45	3·55
1909	Sept. 29	V	Ilfracombe Reservoir.....	2·50?	0 45	3·33?
1895	June 26	V	Marlborough	2·71	0 50	3·25
1915	June 30	IV	Mildenhall	2·63	0 50	3·16
1903	July 18	VI	Crewe, Betley Hall	2·53	0 50	3·04
1905	July 9	III	Enfield, Carisbrooke.....	2·44	0 50	2·93
1911	May 31	II	Epsom, Ashley Road.....	2·44	0 50	2·93
1901	July 29	II	Wadhurst, Lower Cousley Wood	3·25?	0 55	3·55?
1913	June 17	IV	Elvedon Hall.....	2·85	0 58	2·95
1901	July 12	II	Maidenhead, Lowood.....	3·63	1 0?	3·63?
1903	May 30	II	Beddington Corner.....	3·50	1 0	3·50
1911	May 26	II	Fareham, The Mount.....	3·00	1 0	3·00
1897	July 21	IV	Ipswich, Bishops Hill.....	2·95	1 0	2·95
1895	June 26	VI	Worcester, Diglis Lock.....	2·75	1 0	2·75
1909	June 1	XII	Carsphairn, Shiel.....	2·71	1 0?	2·71?
1873	July 28	XVII	Fettercairn.....	2·60	1 0	2·60
1889	June 7	II	Tonbridge, Ferndale.....	2·60?	1 0?	2·60?
1886	July 25	VIII	Sale, Brooklands.....	2·58	1 0	2·58
1899	July 22	V	Dorchester Water Works.....	2·56	1 0?	2·56?
1875	July 22	V	Trowbridge, Sunnyside.....	2·53	1 0	2·53
1875	June 29	III	Cardington.....	2·50	1 0	2·50
1886	July 25	IX	Wakefield, Stanley Vicarage...	2·50	1 0	2·50

Table XV.—*Heavy Falls in Short Periods in* 1930.

County and River Division.	Station.	Date.	Amount.	Duration.	Rate per Hour.
	(a) EYE OBSERVATIONS		in.	min.	in.
Stirling 4	Fintry (Police Station).....	July 19	·47	6	4·70*
Tipperary ..1	Terryglass (Old Court).....	June 22	·25	6	2·50
Hertford ...2	Hemel Hempstead (Northridge)	June 18	·50	8	3·75
Hertford ...2	Redbourn (Crecy)	June 18	·37	8	2·78
Haddington .5	East Fortune Sanatorium.....	Aug. 29	·80	10	4·80*
Durham.....1	Middleton-in-Teesdale (Newbiggin)	Aug. 9	·44	10	2·64
London.....1	Streatham Common (Arragon Gardens)	Nov. 2	·33	10	1·98
Surrey.....5	Worcester Park(KingsmeadAv.)	Nov. 2	·53	11	2·89
Northampton4	Northampton (Upton).....	June 18	1·00	20	3·00
Nottingham..5	Retford (Babworth Hall).....	Aug. 29	·90	20	2·70
Flint 1	Hawarden (County School)....	June 18	·67	20	2·01
Hampshire .1	Shanklin (Pomona Road).....	Oct. 17	·61	20?	1·83
Shropshire ..3	Bishops Castle (Castle Street)..	June 18	·86	23	2·24
Wiltshire ...2	Kilmington Rectory.....	Nov. 2	·68	25	1·63
Yorks W.R.10	Ilkley (Ben Rhydding)	Apr. 25	1·84	30	3·68*
Cumberland.3	Beckfoot (Eskdale Vicarage)..	June 9	1·34	30	2·68
S. Lancs 3	Helmshore (Clough House)....	Aug. 29	1·18	30	2·36
Durham 1	Eggleston House School.....	May 26	1·00	30	2·00
Nottingham..5	Retford (Babworth Hall).....	June 18	·98	30	1·96
Gloucester ..7	Cirencester (Gwynfa).....	June 13	·78	30	1·56
Bedford 2	Dunstable (Cement Works)....	June 18	·78	30	1·56
Kent 2	Nonington (Lynton)	July 20	·72	30	1·44
Nottingham .5	Langold (Council School).....	June 18	2·02	35	3·46*
Midlothian ..2	Oxenford Castle Gardens	Aug. 29	·80	36	1·33
Yorks N.R...1	Middleham (Cotescue)	Aug. 27	1·75	45	2·33
Northumb'l'd3	Corbridge (Howden Dene).....	Aug. 29	1·61	45	2·15*
Surrey.....5	Surbiton (Seething Wells).....	June 18	1·60	45	2·13*
Hampshire...9	Highclere (Castle Gardens)....	June 18	1·13	45	1·51
Wiltshire ...1	Westbury Vicarage	June 13	1·03	45	1·37
Lincoln 5	Brigg (Wrawby Road).....	June 18	·97	45	1·29
Wiltshire ...1	Westbury (Cambridge House)..	June 13	·92	45	1·23
Norfolk 1	Swanton Morley Rectory.....	June 18	2·11	50	2·53*
Lincoln 3	Anwick Vicarage.....	June 18	1·53	50	1·84
Wicklow ...4	Rathnew (Clonmannon).....	July 3	1·17	55	1·28
Nottingham.5	Wellbeck Abbey	June 17	2·78	60	2·78‡
Hertford ...3	Hoddesdon.....	June 18	2·18	60	2·18*
Nottingham..5	Harworth Colliery.....	June 17	1·37	60	1·37
Essex 2	Forest Gate (Monega Road)...	June 18	1·61	65	1·49
Middlesex...1	Ealing (St. Stephen's Road)...	June 18	1·23	70	1·03
Yorks N.R...1	Leyburn (Spennithorne).....	Aug. 29	2·05	75	1·64*
Essex 2	Manor Park (City of London Cemetery)	June 18	1·60	75	1·08
S. Lancs.....1	Formby (The Dunes).....	Sept. 11	1·53	75	1·22
Kent 3	Sittingbourne (Torry Hill)....	Aug. 30	2·28	90	1·52*
Glamorgan..5	Port Talbot (Groeswen Ganol).	Sept. 11	1·48	105	0·85
C. Lancs 1	Sabden (Whinns House).....	June 18	2·66	120	1·33‡
Dorset.....4	East Stour (Homestead).....	June 13	2·65	120	1·33‡
Middlesex ..1	Willesden Green (Strode Road).	June 17	1·46	120	0·73
Wiltshire ...1	Devizes (Highclere)	June 13	1·38	120	0·69

* "Remarkable" fall. ‡ "Very Rare" fall.

Table XV.—*Heavy Falls in Short Periods in* 1930—(*con.*).

County and River Division.	Station.	Date.	Amount.	Duration.	Rate per Hour.
	(b) AUTOGRAPHIC RECORDS		in.	min.	in.
Kent 1	Dover (Barton Road).....	July 30	·25	6	2·50
Nottingham..5	Worksop (Hodsock Priory)....	June 17	·23	6	2·30
Warwick....1	Bideford (Moor Hall).....	June 13	·50	7	4·29*
Cork 7	Cork (University College).....	Oct. 19	·24	8	1·80
Suffolk 3	Felixstowe Aerodrome.....	June 17	·39	9	2·60
Kent 2	Lympne Aerodrome.....	July 1	·39	9	2·60
Surrey.....5	Richmond (Kew Observatory).	June 18	·40	10	2·40
Nottingham .5	Worksop (Hodsock Priory)....	June 18	·50	12	2·50
Suffolk 3	Felixstowe Aerodrome.....	July 10	·39	12	1·95
London 1	Eltham (High Street).....	Aug. 29	·90	14	3·86*
Surrey.....5	Leatherhead (Dunard Lodge)..	Aug. 29	·64	15	2·56
Surrey.....5	Leatherhead (Dunard Lodge)..	Sept. 6	·49	15	1·96
Kent 1	Dover (Barton Road).....	July 24	·52	18	1·73
Fife 3	Leuchars (Training Base).....	Aug. 28	1·17	24	2·93*
Kerry 3	Cahirciveen (Valentia Observ.).	Sept. 19	·75	30	1·50
Yorks N.R...2	Felixkirk (Mt. St. John).....	July 14	1·27	48	1·59
Cheshire 1	Goyt Valley (Oldfield).....	Aug. 29	1·70	70	1·46
Derby 1	Goyt Valley (Upper Hall).....	Aug. 29	1·40	70	1·20
London 2	Kensington Palace.....	June 17	1·24	106	·70
London 2	St. Pancras (Camden Square)..	June 2	1·36	114	·71

* " Remarkable " fall.

The total number, 91, is considerably greater than that of any year back to 1868, but this is partly due to the increase in the number of recording rain-gauges. In 1927 there were 79 entries.

As is usually the case the bulk of the entries in Table XV are for the three months, June, July and August. In fact, there are only 17 entries for the other months. Previously about two-thirds of the total number of intense falls on record have occurred in these three months. Most of the intense falls in 1930 occurred in June and August, while July ranked next.

The observer, Mr. A. L. Sadler, at Tiverton (Lythecourt) supplies the following note, although no measurements are available for inclusion in Table XV :—

> " The 2·50 inches recorded on April 4th was the result of a cloud-burst or abnormal storm, the centre of which was presumably about ¼-mile from the gauge. In a small valley above this house a trough was torn out of a grass field about 200 yards long, 6 feet deep and varying in width from 3 to 10 feet, and the damage done was unprecedented in this area. Unfortunately, I did not return home until a great part of the storm was over, but most of the rain fell between 14·30h.* and 18h."

* Greenwich Mean Time is used throughout the article.
Add one hour to get Summer Time.

The earliest entry in Table XV, for April 25th, at Ilkley, ranks as a "remarkable" fall. Intense falls so early in the year are unusual. Mossman found that only 1·2 per cent. of the heavy rains in short periods during the 46 years, 1868 to 1913, occurred in April. (See *British Rainfall* 1913, page 49). The following measurements were originally supplied by Mr. Terence More, of Ben Rhydding, and further details are given in *The Meteorological Magazine* 1930, pages 110–112.

> "At Ilkley (Spence's Garden), about 2 miles further west, 1·08 in. was recorded as falling in 25 minutes, while it is estimated that 1·84 in. of rain fell at Ben Rhydding in 30 minutes. At Ben Rhydding, thunder was first heard at 15h. 25m. and rain began at 15h. 30m., changing to hail at about 15h. 40m., which lasted for 5 minutes or a little longer."

A photograph taken by Mr. A. Anning, Ben Rhydding, is reproduced as the frontispiece. This shows the main road from Ilkley to Otley, at Escroft, about 1½ miles below Ben Rhydding.

The photograph is taken looking towards Rumbald's Moor. There is hail on the wooded hillside in the background, but none on the footpath. The River Wharfe, visible through the railings on the right, is no higher than the ordinary winter level.

Intense falls are on record for May 26th, at Eggleston House School, and for May 30th, at Lympne Aerodrome.

The following interesting details of the intense rain of the 26th, at Cupar (Pitlair), were supplied by Mr. Peter Webster, the head gardener :—

> ". . . . the rainfall of 1·17 inches fell in half-an-hour between 15h. and 16h. in a regular cloud-burst. Over Rankeillour, about 1 mile N.W., had ·41 inch, and Lower Rankeillour, about 1 mile to the south, had ·57 inch, and within 2 miles of us to the south there was not a drop. The road leading up to the garage is now mostly in a field and a good part of the garden is now down the Eden ! "

In June, intense falls occurred on the 2nd, 9th, 13th, 17th, 18th, and 22nd. There is only one entry in the table for the 2nd, viz., at St. Pancras (Camden Square) and one for the 9th, viz., Eskdale Vicarage, in Cumberland, when 1·34 inches fell between 15h. 50m. and 16h. 20m. There are five entries for the 13th : Cirencester, Westbury Vicarage, Westbury (Cambridge House), East Stour, Devizes and Bidford in Warwick. The fall at East Stour ranks as "very rare." At Devizes (Highclere) a severe thunderstorm gave 1·38 inches from 14h. 15m. to 16h. 15m., while at Westbury the intense rain fell later and lasted from 16h. to 16h. 45m. The rain was torrential and accompanied by hail ; severe flooding occurred in parts of the town. At Cirencester, ·50 inch fell in 10 minutes during the most intense portion of the storm. At Bishops Cannings, near Devizes, 1·68 inch was recorded in 3½ hours.

There are six entries for June 17th: Harworth Colliery, near Doncaster, Wellbeck Abbey, Hodsock Priory, Felixstowe Aerodrome, Willesden Green and Kensington Palace. The measurement at Hodsock Priory was for the most intense portion of a storm, which gave ·76 inch in 50 minutes. At Willesden Green, 1·46 inches was recorded from about 16h. to 18h. At Wormwood Scrubs, 1·50 inches fell roughly between 16h. 45m. and 17h. 10m. At Kensington Palace, ·39 inch fell in 6 minutes; ·59 inch in 12 minutes; ·84 inch in 42 minutes, and 1·24 inches in 1 hour 36 minutes. At South Kensington (Meteorological Office), ·49 inch was recorded in 6 minutes, but as the gauge is exposed on the roof the record is not included in Table XV. At Barrow Hill, ·91 inch fell roughly between 16h. 25m. and 17h. 52m.

Intense falls were more widespread on June 18th than on any other day of the year. (See also The *Meteorological Magazine*, 1930, pages 129–131.) The only considerable parts of England which escaped thunderstorm rains were the south-west and the south coast. The day will probably be remembered for the flooding of Ascot racecourse, where for the first time on record the racing was abandoned. No details are available about the intensity of the rain at Ascot, but at The Manor House, West End, Woking, the following observations were made by Mr. Fred A. Walter:—·35 inch between 13h. 10m. and 13h. 30m.; ·34 inch between 13h. 45m. and 14h.; and ·42 inch between 14h. 35m. and 14h. 50m.; a total of 1·11 inches. The total for the day at Ascot (Heatherwood Hospital) was 2·74 inches. At the Isle of Dogs, 1·40 inches fell between about 14h. 36m. and 15h. 11m., and at Deptford, 1·67 inches fell roughly between 14h. 28m. and 14h. 58m. Serious flooding occurred in the Isle of Dogs and other parts of London as a result of intense rain of the afternoons of both the 17th and 18th. The measurements at Langold (Worksop), Surbiton, Swanton Morley, and Hoddesdon rank as "remarkable," while that at Sabden (Blackburn) is "very rare." The thunderstorm at Sabden caused widespread flooding in the district. For certain stations the times of the heavy rain are set out below:—Hemel Hempstead, ·50 inch, from 12h. 52m. to 13h.; Redbourn, ·37 inch, from 13h. 7m. to 13h. 15m.; Bishop's Castle, ·86 inch, from 16h. 40m. to 17h. 3m.; Hawarden, ·67 inch, from 13h. 30m. to 13h. 50m.; Brigg, ·97 inch, from 16h. 30m. to 17h. 15m.; Swanton Morley, 2·11 inches, from 16h. 40m. to 17h. 30m.; Anwick Vicarage (near Sleaford, 1·53 inches, from 16h. 25m. to 17h. 15m.; and Hoddesdon, 2·18 inches, from 14h. to 15h. At Hodsock Priory, the fall of ·50 inch in 12 minutes was for the most intense portion of a fall of 1·07 inches between 14h. 40m. and 16h., and followed a similar fall on the 17th. At Dunstable Cement Works, at Houghton Regis, there were two intense falls: on the 18th, ·60 inch, from 10h. 15m. to 10h. 40m.; and ·78 inch, from 12h. 40m. to 13h. 10m. Mr. F. Hudleston, of

Hutton John, gives some interesting details of the " cloud-burst " which occurred on June 18th, at Stainmore Common, to the east of Brough between Kirby Stephen and Barnard Castle, but no actual measurements of the rainfall are available (see Part IV).

The fall of ·25 inch in 6 minutes, on June 22nd, from 14h. 25m. to 14h. 31m., at Terryglass, on Lough Derg, Co. Tipperary, is worthy of comment as one of the two falls in Table XV(*a*) for stations in Ireland. The other one is of 1·17 inches, in 55 minutes at Rathnew, on the coast of Wicklow, on July 3rd.

By far the greater number of intense falls in July, August and September are from the autographic records, and as many as 25 of these are for rains which lasted only 5 or 6 minutes; they are relatively unimportant.

The entry of ·47 inch in 6 minutes, at Fintry Police Station, to the south-west of Stirling, for July 19th, is one of the few entries for stations in Scotland.

During the severe thunderstorm, on August 9th, ·44 inch was measured between 15h. 20m. and 15h. 30m., at Newbiggin, in the Upper Tees Valley, and the schoolmaster there, Mr. R. Coggins, noted hailstones $\frac{3}{4}$-inch in diameter.

The entry for August 28th, at Leuchars Aerodrome, 1·17 inches, between 21h. 36m. and 22h. ranks as " remarkable."

The bulk of the entries for August are for the 29th, and include those for Eltham, in south-east London, of ·90 inch in 14 minutes; for East Fortune Sanatorium, in Haddingtonshire, of ·80 inch in 10 minutes; for Corbridge, in Northumberland, of 1·61 inches in 45 minutes; and for Leyburn, of 2·05 inches in 75 minutes, which rank as " remarkable." At Eltham, the heavy rain occurred about midnight on the 29th and 1·25 inches fell in 45 minutes, of which ·90 inch fell in 14 minutes. At Helmshore, near Manchester, the observer notes that, " the hailstones were fully the size of pullet eggs "; at Corbridge, reference is made to the considerable quantity of broken glass in greenhouses; at Leyburn (Spennithorne), Mr. F. M. Curtis, " measured many spherical hailstones of $\frac{3}{4}$-inch diameter and noted one coralline stone which was rather too big to put into the rain measure and contained as much water when melted as a fall of ·04 inch of rain in a five-inch rain-gauge."

The Engineer, Stockport Waterworks, has forwarded traces from recording gauges in the Upper Goyt Valley, to the west of Buxton, which indicate that on the 29th about 1·40 inches fell in 70 minutes at Upper Hall and about 1·70 inches in 70 minutes at

Oldfield. This intense rain caused much erosion in the valley. Mr. E. C. Rutherford, who visited the area soon after, writes :—

> ". . . . on the west side of the Goyt Valley there was an area of rainfall of tremendous intensity, for on the sites of what are normally very small tributary streams flowing in from the west, great masses of rocks and boulders have been hurled down and a chasm fifty yards across has been torn in the valley side. About 2 miles from its source an old set of stepping-stones has been entirely removed and the whole aspect of the spot changed. I was told that the water came down in a great wave several feet high."

Some interesting details of the very severe hailstorm of August 29th, near Peebles, are given by Comm. Arthur Venables, R.N., in the *Meteorological Magazine*, 1930, pp. 184–5. He notes that the Hydro Hotel had over 1,200 panes smashed on the west side, and that on the moors, on the way to shoot grouse, "hailstones of 5 inches in circumference and over, fell for 10 minutes, in a mass, accompanied by a deluge of rain, and a wind of 50 m.p.h. or more, from the north-west, and the thunder and lightning was incessant."

The intense rain at Sittingbourne occurred between 1h. and 2h. 30m., on August 30th, when 2·28 inches was recorded. The observer, Mr. D. Leigh Pemberton, comments on the severe and continuous thunder and lightning.

The observers at Port Talbot and Formby, near Southport, who recorded intense rain on September 11th, both comment on the extreme local character of the intense rain.

The following comments were forwarded by Capt. J. E. Cowper in connexion with the intense rain of October 17th, at Shanklin, which occurred between 9h. and 10h. :—

> " The sky darkened in the south and a gusty southerly wind brought an absolute deluge of rain for only 20 minutes or so. 0·61 inch of rain was measured in this time and flooding was general in the lower parts of the town. Water poured down the Hope Road leading to the sea in a torrent two or three feet deep and large stones were dislodged."

The entries for November 2nd, at Streatham Common, Worcester Park, and Kilmington Rectory, are worthy of comment, because it is unusual to experience thunderstorm rain of this intensity so late in the year.

Table XVI.—*Number of Days on which specified amounts of Rain fell in specified times during* 1930.

County.	Place.	0·2 inch.				0·4 inch.				1 inch.			
		6 min. or less.	15 min. or less.	30 min. or less.	60 min. or less.	15 min. or less.	30 min. or less.	60 min. or less.	2 hours or less.	1 hour or less.	2 hours or less.	5 hours or less.	24 hours or less.
London	Camden Square.....	0	6	7	12	0	2	3	3	2	2	2	2
Surrey	Croydon.....	0	2	7	13	0	0	2	3	0	0	0	0
,, ...	Kew Observatory.....	5	8	8	11	2	4	4	5	0	0	0	0
Kent	Lympne	3	4	6	16	1	2	2	4	0	0	0	3
Hants.....	Calshot	0	0	2	8	0	0	0	1	0	0	0	0
,, ...	Worthy Down.....	0	0	2	7	0	0	0	2	0	0	0	2
,, ...	South Farnborough	2	5	7	10	0	1	3	4	0	0	0	1
Oxford	Upper Heyford	0	2	3	11	0	0	0	0	0	0	0	0
Suffolk	Felixstowe	3	4	7	8	2	3	4	5	0	0	0	0
Devon	Mount Batten.....	0	2	5	13	0	0	0	4	0	0	0	7
Lincoln	Cranwell	1	1	4	9	0	0	0	1	0	0	0	0
Lancashire	Southport	1	1	1	9	0	0	0	3	0	0	0	2
Flint.....	Sealand	2	3	4	11	0	0	0	3	0	0	0	1
Anglesey	Holyhead	1	3	8	14	0	1	1	3	0	0	0	5
Dumfries	Eskdalemuir.....	3	6	15	28	0	2	4	15	0	0	0	13
Renfrew	Renfrew	1	2	5	15	1	2	2	3	0	0	2	3
Fife	Leuchars	2	3	6	9	2	2	3	4	1	1	2	4
Aberdeen.....	Aberdeen	2	5	6	15	0	0	0	2	0	0	0	4
Shetland	Lerwick.....	0	1	6	10	0	1	1	4	0	0	0	1
Co. Kerry	Valentia Observatory ...	2	4	13	35	1	1	3	12	0	0	2	12
Co. Armagh....	Armagh Observatory ...	0	1	1	9	0	1	1	2	0	0	0	0
Co. Antrim	Aldergrove	1	4	5	12	0	0	1	2	0	0	0	1

The falls are not necessarily continuous nor are they always confined to one calendar day. If a fall occupies parts of two days it is regarded as belonging to the day which contributes the greater share to the amount of the fall. Not more than one fall of each specified amount is credited to any day; if more than the specified amount fell on any day, that part of it which fell in the shortest time is used for the table.

An entry in any of the first three columns under each of the headings 0·2, 0·4 and 1 inch naturally recurs in the column or columns to the right.

In the preceding section the material has been provided both from autographic records and from eye observations at any of the 5,000 rainfall stations. Another method of dealing with the frequency of heavy falls of rain is to confine attention to the stations with autographic records and to examine the traces for all the rain which occurs at these stations. That has been done for the stations set out in Table XVI. In the tabulations on which the classification is based, the shortest interval in which ·2 inch (5 mm.) falls is entered for each day on which so much rain occurs. Similarly with falls of ·4 inch and 1 inch. Cases in which a fall of the given amount occupied parts of two days are included, but each fall counted is of less than 24 hours' duration and only one fall of the given amount is credited to each calendar day. In the classification adopted in Table XVI, the first time limit for each of the stated amounts is nearly in accordance with the specification of a noteworthy fall (*see* diagram) and corresponding entries will be found in Table XV.

It is convenient to give references to statistics of intense falls of rain, recorded at Camden Square (London) and published in earlier volumes of *British Rainfall.*

British Rainfall, 1925, pages 52 and 53.

(*a*) Table XVII.—Heavy falls in short periods of one hour or less, 1894–1925.

(*b*) Table VIII.—Rainfall recorded June 23rd, 1878. This was one of the most striking storms ever recorded in London.

British Rainfall, 1929, page 53.

(*c*) Table XVIII.—Falls of rain exceeding certain specified amounts in 10, 15, 30 and 60 minutes during the nine years, 1921 to 1929.

Reference should also be made to two recently published papers which give summaries of the information contained in this section in the various volumes of *British Rainfall*:—

(1) The Areas covered by Intense and Widespread Falls of Rain. Proc. Inst. Civil Engin., 229, 1929, Pt. I.

(2) Heavy Falls of Rain in Short Periods (two hours or less): Q.J.R. Meteor. Soc. 1931, pages 57–64.

7. HEAVY FALLS ON RAINFALL DAYS IN 1930.

The daily measurements of rain which are set out in this Section are (*a*) those of falls of 2·5 inches or more in the rainfall day, and (*b*) those of falls which amount to at least 7·5 per cent. of the total recorded for the year 1930. A fall of 2½ inches in a day at any station is sufficiently remarkable to be noticed, but as such heavy falls are more frequent in the normally wet areas of mountain districts than elsewhere, the criterion of 7½ per cent. was introduced to admit certain falls of less than 2½ inches in areas where the total rainfall for the year is less than 33·3 inches. In this way daily falls which are heavy in relation to the local standard are not neglected. It will be seen that by far the majority of the falls noticed, satisfy criterion (*a*), but do not satisfy criterion (*b*). Many of the falls in the London area on June 18th did not reach 2·5 inches, although they were more than 7·5 per cent. of the annual totals. On the other hand the falls of August 20th did not in any case reach 7·5 per cent. of the annual totals, although they reached 2·5 inches. Many of the falls in Yorkshire, N.R., of July 22nd satisfied both criteria simultaneously.

The greatest amount measured in a day in 1930 was 5·70 inches, on July 22nd, at Castleton in the North Yorkshire Wolds. It will be seen from the table below that larger falls have been recorded in most other years. This occurred, however, in a run of wet days which was unprecedented, at any rate, in that neighbourhood. The amounts at Castleton for the 20th, 21st, 22nd and 23rd were 2·70 inches, 2·32 inches, 5·70 inches and 1·25 inches, a total of 11·97 inches in four days. The average annual rainfall at Castleton for the period 1881 to 1915 is about 35·5 inches, so that on these four days as much rain fell as usually occurs in four months. The fall on July 22nd was 11·0 per cent. of the annual total. The fall at Cheddar Pumping Station on August 6th of 4·35 inches was also 11·0 per cent. of the annual rainfall.

A table showing the absolute maximum daily rainfall and the absolute maximum daily percentage reported for each year from 1865 to 1921 was published in *British Rainfall*, 1921, p. 86. The portion of that table from 1913, completed by the addition of particulars for the years 1922 to 1930, is printed here. This portion contains the highest values shown in the complete table from 1865 to 1929, both as to amount and percentage; these figures are printed in heavy type.

TABLE XVII.—*Maximum Daily Fall and Maximum Percentage, 1913 to 1930.*

Year.	ABSOLUTE HIGHEST RAINFALL.				ABSOLUTE HIGHEST PERCENTAGE.				Year.
	Depth.	Per cent.	Station.	Div.	Per cent.	Depth.	Station.	Div.	
	in.					in.			
1913 ..	6·06?	**26·0?**	Doncaster Pumping Station.	9	**26·0?**	6·06?	Doncaster Pumping Station.	9	1913
1914 ..	6·35	4·1	Pen-y-Gwryd	11	14·8	3·35	Upminster	4	1914
1915 ..	7·06	19·7	Dalcross	18	19·7	7·06	Dalcross	18	1915
1916 ..	8·20	5·7	Kinlochquoich.....	18	13·1	3·91	Portland Bill.....	5	1916
1917 ..	**9·56**	..	Bruton	5	21·8	8·39	Aisholt	5	1917
1918 ..	4·95	9·2	Douglas	11	12·3	3·36	Woodsetts Grange....	9	1918
1919 ..	4·50	5·9	Corran	15	11·1	3·57	Ayr Cemetery.....	15	1919
1920 ..	6·81	5·4	Dungeon Ghyll.....	10	15·6	4·69	Elkington Hall	7	1920
1921 ..	6·10	5·2	,, ,, ...	10	21·3	3·15	Pulham.....	4	1921
1922 ..	5·14	5·6	Ardgour House.....	15	16·5	4·70	Doncaster, Carr Ho. Hospital.	9	1922
1923 ..	5·57	3·9	Llechwedd Quarry..	11	11·6	4·16	Rugeley, Brindley Bk.	6	1923
1924 ..	9·40	19·5	Cannington, Brymore	5	19·5	**9·40**	Cannington, Brymore..	5	1924
1925 ..	*4·13*	*2·8*	Snowdon (L. Llydaw Copper M.).	9	11·4	*2·35*	Boston (Fishtoft S.)..	7	1925
1926 ..	6·05	9·4	Abergwesyn (Nantneuadd).	11	10·9	4·57	Pembroke Dock.....	11	1926
1927 ..	6·00	4·6	Blaenau Festiniog (Llechwedd Q.)	11	*10·7*	4·00	Wolverhampton Town Hall.	6	1927
1928 ..	7·77	5·3	Blaenau Festiniog (Oakeley Q.)	11	12·9	3·26	Marton-in-Cleveland (Southcroft)	9	1928
1929 ..	8·31	7·2	Rhondda (Lluest Wen Res.)	11	19·1	4·01	Rumburgh Vicarage..	4	1929
1930 ..	5·70	11·0	Castleton	9	11·0	5·70	Castleton	9	1930

The largest entry in each column is shown in heavy type and the smallest in italic type.

Particulars of the 12 largest falls of the year 1930 are given in Table XVIII. The table shows also the year's total at each of the stations and the percentage of that total which is accounted for by the highest daily fall. Only one entry is given for each of the stations included in the table.

TABLE XVIII.—*The largest Daily Rainfalls in* 1930.

Date.	Div.	Station.	Depth.	Per cent. of Year.	Total for Year.
			in.	%	in.
July 22	IX	Castleton	5·70	11·0	51·92
July 22	IX	Danby School	5·20	9·9	52·45
July 22	IX	Danby Lodge	5·20	9·5	54·74
July 22	IX	Kildale Hall.....	4·55	9·3	49·04
July 22	IX	Guisborough (Lockwood Res.)	4·46	9·2	48·47
Aug. 6	V	Cheddar (Pumping Station).....	4·35	11·0	39·53
Sept. 17	XI	Ramsey (Town Hall).....	4·35	7·7	56·49
Sept. 17	XI	Ramsey (N. Promenade)	4·32	7·7	55·90
July 25	IX	Wetherby (Stockeld Park).....	4·20	10·8	38·75
Aug. 6	V	Winscombe (The Down).....	4·20	10·0	42·14
July 22	IX	Ingleby Manor	4·15	8·7	47·53
June 18	VII	Glossop W.W. (Swineshaw).....	4·10	7·4	55·34

No entry of this table qualifies for admission to the list of heavy falls of 6·5 inches or more in one day which was printed in *British Rainfall*, 1929, p. 56. An unusual feature is that all the entries of Table XVIII are confined to the summer half-year. Six of the largest falls are for July 22nd. The table confirms the conspicuous absence during the year of heavy orographical rains which occur during the winter months in most years.

The total number of heavy falls recorded during 1930 is smaller than usual, and many less than in 1929. The number of falls of 3 inches or more in 1930 for England and Wales, Scotland and Ireland, was 48, 11 and 7, compared with 244, 9 and 7, in 1929.

In the tables included in the following account of the heavy falls of the year, a daily fall which is the maximum fall for the year at the station is indicated by ordinary Roman type; other falls are in *italics*.

A striking feature of the tables of heavy falls on rainfall days in 1930 is the small number in the winter months in the mountainous regions. In most years there are one or two days with heavy falls at a large number of stations in these regions. On the other hand it is shown in Section 6 that the number of intense falls in short periods in the summer months was unusually large in 1930. The only day with a large number of entries in this section for thunderstorm rains was June 18th. The rains of July 20th to 23rd, however, deserve special comment. They were due to a depression which persisted off the east coast of Lincolnshire from the morning of the 21st to the 24th, and maintained strong northerly winds over the north Yorkshire Wolds. The distribution of the rainfall was controlled to a large extent by the configuration of the land, the largest amounts occurring over the more elevated parts of the moors and the least rainfall immediately to the south. As much as 11·97 inches was recorded for these four days at Castleton.

Many days in 1930 gave an isolated entry of 2·5 inches or more at one of the usually wet stations. These were associated with Atlantic depressions of which the centres passed eastwards to the north of Scotland. On these occasions the British Isles are in the south-east quadrant of the depressions; the winds are south-west in direction and usually strong. The rain is of the "warm front" type, and locally in mountainous regions the falls are very considerable, being augmented by orographical effects, by which the relatively warm moist current is lifted to such an extent as to provoke copious condensation which may last without intermission for many hours. Good examples of this type of precipitation are afforded by the rains of November 11th, 18th, 19th and 24th, 1929. In 1930, the rainfall of August 20th was of this type and more entries are given in the chronicle for this day than for any other day of the year.

CHRONICLE.

Heavy falls of rain occurred on a number of days in January, but they were in general isolated falls at wet stations. The most striking were those of 3·48 inches at Kilgarvan (Inchimore) in the mountains of Kerry, on the 21st, and of 3·20 inches at Fofanny Reservoir in the Mourne Mountains, on the 31st.

January 1st.

Dumbarton.—Glen Finlas Reservoir No. 7.....*2·65 in.* or *2·9* per cent.*

January 2nd.

Carnarvon.—Snowdon (Llydaw Intake) No. 10.....*2·75 in.* or *1·7* per cent.

January 6th.

Carnarvon.	*in.*	or %	*Inverness.*	*in.*	or %
Snowdon (Cwm Dyli) No. 11	*2·50*	*1·8*	Loch Quoich (Glenquoich)	*2·50*	*2·1*

January 7th.

Cumberland.—Buttermere (Hassness).....*2·68 in.* or *2·5* per cent.

January 10th.

Westmorland.	*in.*	or %	*Argyll.*	*in.*	or %
New Dungeon Ghyll Hotel	*2·80*	*2·8*	Ardkinglas	2·55	3·2
Carnarvon.					
Snowdon (Cwm Dyli) No. 11	*2·52*	*1·8*			

January 11th.

Brecon.—Trecastle (Blaenau-hydfer).....2·70 *in.* or 3·5 per cent.

During the afternoon and evening of the 12th an unusually severe gale swept across southern Ireland and the greater part of England and Wales. Considerable damage resulted, *e.g.*, in the immediate vicinity of the small market town of Devizes " something like 500 trees were swept down in that hour's fury of the elements on that Sunday evening." It is worthy of note that the amounts of rain reported were generally small and none qualify for mention in this section. Further details of the gale are given in the *Meteorological Magazine*, 1930, pp. 1–6.

---

* The amounts in this section cover the 24 hours commencing at 9 a.m. G.M.T. on the day of entry.

January 13th.

Westmorland.	*in.*	or %	*Carnarvon.*	*in.*	or %
Patterdale (Greenside Mine)	3·04	2·8	Snowdon (Cwm Dyli) No. 11	*2·85*	*2·0*
			Snowdon (Llydaw Intake) No. 10	*2·85*	*1·8*

January 14th.

Glamorgan.—Pontycymmer (Police Station).....*2·62 in.* or *3·0* per cent.

January 18th.

Mayo.—Delphi Lodge.....2·57 *in.* or 2·3 per cent.

January 21st.

Kerry.—Kilgarvan (Inchimore).....*3·48 in.* or *3·0* per cent.

January 22nd.

S. Devon.—Princetown (H.M. Prison).....*2·65 in.* or *2·7* per cent.

January 31st.

Down.—Mourne Mountains (Fofanny Res.).....*3·20 in.* or *3·7* per cent.

There were no heavy falls of rain during February, a month noteworthy for the persistence of anticyclonic conditions and the prevalence of north-easterly winds.

March 30th.

Kerry.—Kilgarvan (Inchimore).....3·80 *in.* or 3·3 per cent.

March 31st.

Kerry.—Kilgarvan (Inchimore).....*3·12 in.* or *2·7* per cent.

The total rainfall for March 30th and 31st at Kilgarvan (Inchimore) was 6·92 inches. The total for these days at other stations was:—Kenmare (Sheen Falls) 3·40 inches; Killarney, 2·84 inches; Dunmanway, 2·55 inches; Cork, 2·09 inches. The heavy rain was caused by an intense and deepening depression which moved slowly north-eastwards from the west of Ireland, and an associated secondary depression which moved across the south of Ireland.

Only one heavy fall is on record for April, which was in general a dull month with a preponderance of northerly winds.

The thunderstorm at Ilkley on the 25th is also worthy of comment (see Section 6 and frontispiece), but the amount of rain and hail was not sufficient to warrant mention in this section.

April 4th.

S. Devon.—Tiverton (Lythecourt).....2·50 *in.* or 5·3 per cent.

May 17th.

Dumbarton.	*in.*	or %	*Inverness.*	*in.*	or %
Glen Finlas Reservoir No 7.	2·75	3·0	Loch Quoich (Kinlochquoich)	*2·50*	*2·1*
Argyll.					
Ardnadam (Hafton Ho.)..	2·74	3·4			

May 18th.

Inverness.—Loch Quoich (Kinlochquoich).....*3·10 in.* or *2·6* per cent.

The heavy falls on May 17th and 18th were occasioned by a deep depression which skirted the north-west coasts. It gave colder conditions and the largest daily fall of rain for the month, as well as the strongest winds, at many places in the north.

At Kinlochquoich, at the head of the River Garry, a total of 5·61 inches was measured for the two days.

June 9th.

Merioneth.	*in.*	or %	*Merioneth.*	*in.*	or %
Blaenau Festiniog (Oakeley Q.)	2·56	2·3	Blaenau Festiniog (Llechwedd Q.)	2·57	2·2

On the 9th June, while England enjoyed abundant sunshine, a deep depression, which passed eastwards to the south of Iceland together with associated secondaries, brought rain to the north and north-west and subsequently to most parts of England on the 10th and 11th. Only two falls are worthy of comment for the 9th in this section and they are for adjacent stations in North Wales.

From the 12th to the 19th thunderstorms occurred frequently, culminating in severe and widespread storms on the 18th. A note on the *June Thunderstorms* is given in the *Meteorological Magazine*, 1930, pp. 129–131.

A heavy storm broke over the central and northern parts of London shortly after 16h. on the 17th. Some details of the time and amount of the intense rainfall are given in Section 6. *The Times* reports that the District Railway lines between Turnham Green and Gunnersbury were flooded and the services to and from Richmond had to be suspended for about an hour. The downpour was so great at the Houses of Parliament that in Westminster Hall the water rose about 5 inches in places and several rooms in the House were flooded. Parts of the roadway in Piccadilly were flooded to a depth of nearly a foot.

June 18th.

London.	*in.*	or %
Deptford Waterworks.....	2·62	9·2
Greenwich Royal Observ..	2·66	9·7
Greenwich Westcombe Park Road..	2·20	8·7
Westminster Spring Gdns..	2·20	8·4
Poplar Isle of Dogs (Island Gardens).....	2·15	8·5
Berkshire.		
Ascot (Heatherwood Hos.).	2·74	9·5
Hertfordshire.		
Hoddesdon.....	2·34	8·8
Haileybury College.....	2·29	8·3
Northants.		
Rugby (Kilsby Vicarage)..	2·65	7·7
Essex.		
Loughton (High Beach Res.)..	2·95	9·8
East Ham Well.....	2·28	9·2
Forest Gate (Monega Road)	2·24	8·6
Theydon Bois (Fernside)..	2·76	10·2
Theydon Bois (Birch Hall).	3·04	10·5

Gloucestershire.	*in.*	or %
Cheltenham (Thirlestone Hall).....	2·68	7·9
Cheltenham (Sandford Mead).....	3·29	9·8
Cheltenham (Montpellier Gardens).....	3·55	10·5
Staffordshire.		
Bloxwich (Sneyd Reservoir)	2·65	6·7
Brownhills.....	2·71	6·1
Nottinghamshire.		
Welbeck Abbey.....	2·99	8·3
Derbyshire.		
Glossop W.W. (Swineshaw)	4·10	7·4
Cheshire.		
Dukinfield (Higher Reservoir).....	3·35	8·2
Dukinfield (Lower Reservoir).....	3·65	8·7
Lancashire.		
Ashton-u-Lyne (Henrietta St. Yd.) ..	3·28	7·2
Sabden (Whins House)....	2·66	5·2

The only considerable part of England to escape the thunderstorms on the 18th was the south-west and southern coastal districts. The falls which qualify for inclusion in this section are from stations in a number of widely separated parts of the country. Further details of the intense rains which occurred in these different areas are given in Section 6 and in Part IV.

In London the total rainfall for the day exceeded two inches over a large area stretching from Lewisham to Bow and including the Isle of Dogs. At Greenwich Observatory as much as 2·66 inches were recorded. The rain following on the heavy falls on the previous day caused further severe flooding and serious dislocation of traffic.

June 28th.

Kerry.—Kilgarvan (Inchimore).....*3·27 in.* or *2·8* per cent.

July 16th.

Tyrone.—Castlecaulfield (Parkanaur).....2·89 *in.* or 5·9 per cent.

July 20th.

Cheshire.	*in.*	or %
Prenton Waterworks.....	2·55	5·6
Yorkshire West Riding.		
Greenfield (Chew Mount)..	*2·98*	*4·6*
Yorkshire North Riding.		
Castleton	*2·70*	*5·2*
Danby Lodge.....	*2·68*	*4·9*

Yorkshire North Riding.	*in.*	or %
Whitby (Park Hall, Aislaby)..	*2·60*	*6·1*
Guisborough (Lockwood Res.)	*2·70*	*5·6*
Brecon.		
Swansea W.W. (Cray Res.) No. 1	*2·60*	*3·1*

July 21st.

Yorkshire North Riding.	*in.*	or %
Egton Bridge (Bridgeholme)	*2·63*	*5·1*
Danby Lodge	*2·72*	*5·0*

July 22nd.

Yorkshire West Riding.	*in.*	or %
Greenfield (Chew Mount)	3·35	5·1
Penistone (Broadstone Res.)	2·73	5·7
Holmfirth (Thongsbridge)	2·84	5·0
Yorkshire North Riding.		
Masham Moor (Somerside)	2·80	5·8
East Harsley (Harsley Hall)	2·95	7·7
Rounton Grange	2·59	7·3
Egton Bridge (Bridgeholme)	4·07	7·8
Sleights (The Hall)	3·01	6·9
Danby (The School House)	5·20	9·9
Castleton	5·70	11·0
Danby Lodge	5·20	9·5
Whitby (Park Hall, Aislaby)	3·11	7·2
Whitby (Mulgrave Castle)	2·50	6·4
Guisborough (Lockwood Res.)	4·46	9·2
Ingleby Manor	4·15	8·7
Kildale Hall	4·55	9·3

July 23rd.

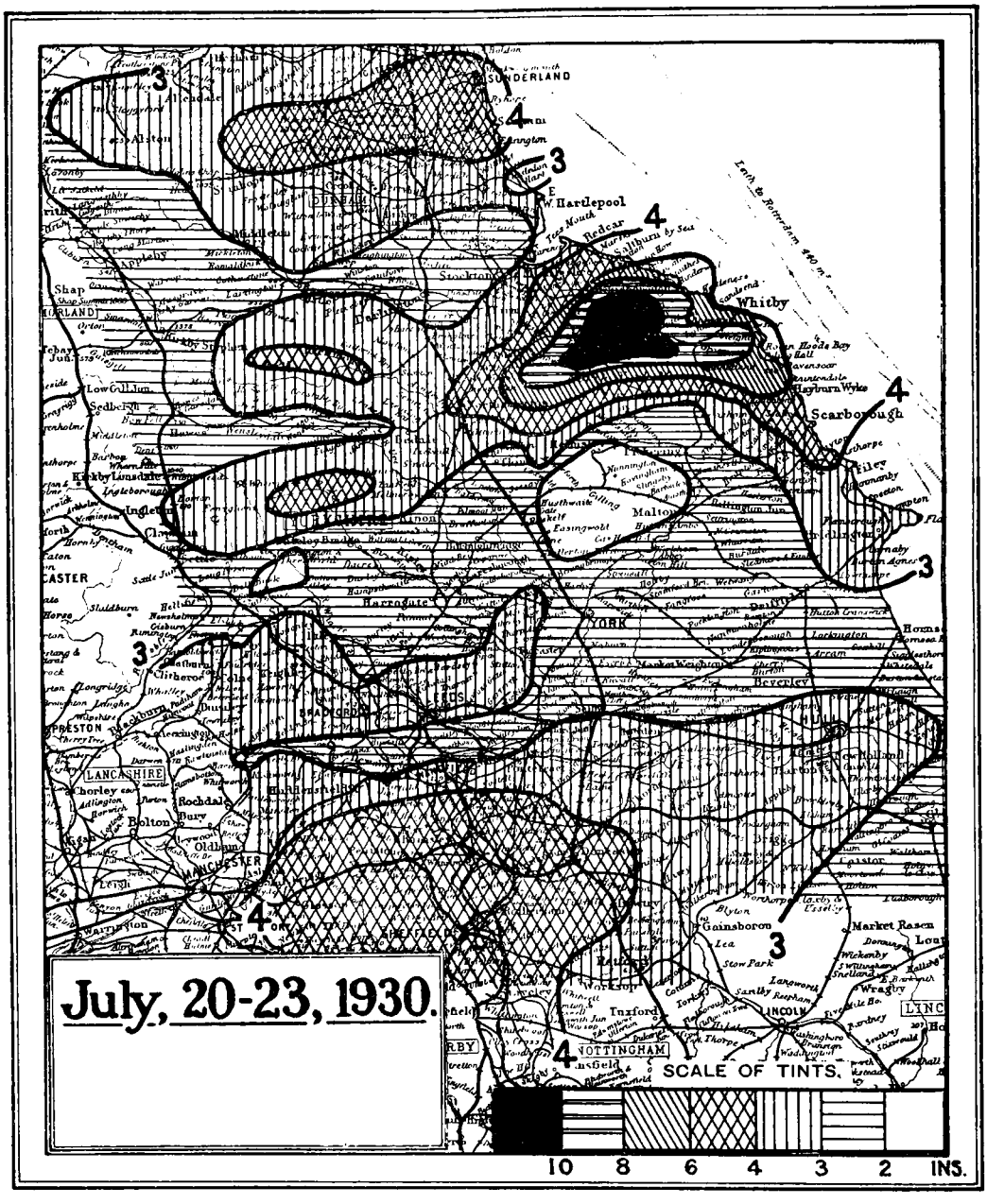
Yorkshire North Riding.	*in.*	or %
Glaisdale (The Gables Gardens)	3·68	6·7
Saltburn (Skelton Castle)	2·61	7·0

One of the outstanding incidents in the rainfall of 1930 was the persistent rainfall of July 20th to 23rd over the North Yorkshire Wolds. At a number of stations the rainfall of these four days exceeded 8 inches and the actual measurements are given below :—

	July, 1930				Total 20th to 23rd
	20th	21st	22nd	23rd	
	in.	in.	in.	in.	in.
Sleights (The Hall)	2·48	2·44	3·01	·38	8·31
Glaisdale (The Gables)	2·17	2·24	3·68	·24	8·33
Aislaby (Park Hall)	2·60	2·46	3·11	·31	8·48
Ingleby Manor	2·05	1·55	4·15	·82	8·57
Egton Bridge (Bridgeholme)	2·44	2·62	4·07	·65	9·78
Kildale Hall	2·28	2·03	4·55	1·18	10·04
Guisborough (Lockwood Reservoir)	2·70	1·84	4·46	1·11	10·11
Danby School	2·46	2·25	5·20	1·13	11·04
Danby Lodge	2·68	2·72	5·20	1·13	11·73
Castleton	2·70	2·32	5·70	1·25	11·97

The distribution of the total rainfall July 20th to 23rd is shown in the diagram map. It will be seen that more than 10 inches were recorded over part of the North Yorkshire Wolds, while at Helmsley only 10 miles to the south, the rainfall was less than 2 inches. At Stockton-on-Tees, about 12 miles to the north-west of this area

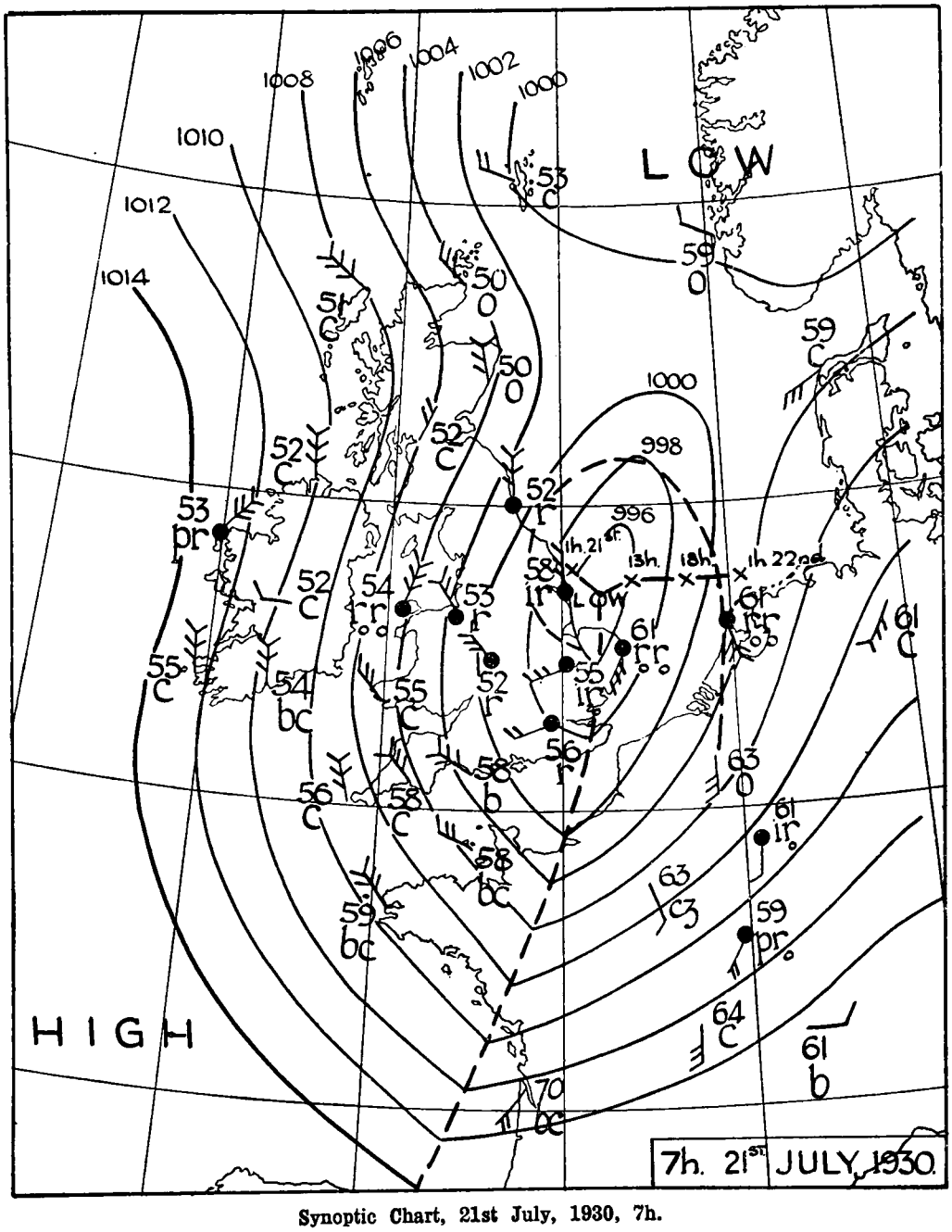
with over 10 inches, only 2·1 inches were measured. This emphasises the small area affected by the heavy rains of these days.



Rainfall, 20th–23rd July, 1930.

In the Sleights to Castleton area the rain appears to have started about 15h. on the 20th and continued with but few breaks until noon on the 23rd. There was a definite break of a few hours on the evening of the 21st. At Sleights the observer notes that there was " never anything more than what I should call heavy rain " ;

while at Danby School the rain of the 22nd is described as " incessant." At Scalby, near Scarborough, the heaviest fall occurred during the



Synoptic Chart, 21st July, 1930, 7h.

BAROMETER.—Isobars are drawn for intervals of 2 millibars, 1,000 millibars=29·53 mercury-inches.

WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0 to 12, is indicated by the number of feathers. A circle indicates calm.

TEMPERATURE is given by figures in degrees Fahrenheit.

WEATHER is indicated by the following notation :—
b, blue sky ; bc, sky partly clouded ; c, generally cloudy ; o, overcast sky ; p, passing showers; r, rain ; d, drizzle ; h, hail. Capital letters indicate "intense" ; suffix ° indicates "slight" repetition of letters indicates continuity ; i denotes intermittent. ●=rain.

morning of the 20th and the evening and night of the 22nd. The observers comment on the steadiness of the rain and the absence of intense falls.

Serious flooding occurred in the Valley of the River Esk and also in the Leven Valley. The Egton and Sleights bridges gave way about 5h. on the 23rd. Subsequently the level of the river fell rapidly. The most serious flooding naturally occurred in the lower Esk Valley, notably between Sleights and Whitby. The bridge at Sleights carried two water mains to supply Whitby, and these were severed when the bridge broke, reducing the town to 48 hours' supply.

Mr. R. H. Rastall, of Turnerdale Hall, Whitby, sends the following additional details :—

> " At one point on my land, about 2 miles below Grosmont, the river rose 30 feet, but I think that was largely due to the blocking of a railway bridge by floating trees. The very small and flimsy pleasure boats of the present-day were found inadequate to remove the inhabitants of certain cottages, as has been done many times in the past with the heavier boats of those days, so some fishermen brought a heavier boat by road from Whitby on a lorry. I have often seen such ' rescues ' in the past, especially at the end of the wet decade 1871 to 1880. I have a vivid recollection of watching a suspension bridge floating down the river on October 28th, 1880, when I was eight years old, and there are records of tremendous floods of the same type in 1866 and 1840."

The heavy rain was due to a depression which persisted off the east coast of Lincolnshire from the morning of the 21st to the 24th, and maintained strong northerly winds over the North Yorkshire Wolds. The distribution of the rainfall was controlled to a large extent by the configuration of the land, the largest amounts occurring over the more elevated parts of the moors and the least rainfall immediately to the south.

A weather map corresponding with observations made at 7h. on the 21st is reproduced. The track of the centre of the depression during the days in question is also shown. It is not unusual for slow moving depressions to be associated with considerable quantities of precipitation. Thus the outstanding rains of June 13th to 15th, 1903, October 26th to 28th, 1909, June 23rd to 24th, 1911, and July 29th to August 3rd, 1917 were all associated with slow moving depressions. It is most unusual, however, for such heavy and persistent rain to occur in the region of northerly winds. Under such conditions the rainfall is usually intermittent.

July 25th.

Yorkshire West Riding.—Wetherby (Stockeld Park)...4·20 *in.* or 10·8 per cent.

August 3rd.

Kent.	*in.*	or %	*Suffolk.*	*in.*	or %
Margate (Cliftonville).....	2·12	8·2	Rendlesham Hall	2·38	7·9

August 6th.

Somerset.	*in.*	or %	*Somerset.*	*in.*	or %
Chewton Mendip (The Priory)	2·60	5·7	Cheddar (Pumping Station)	4·35	11·0
Litton (Sherborne Res.)	3·07	6·8	Winscombe (The Down)	4·20	10·0

During the last week of July and first week of August heavy local rains or thunderstorms were of almost daily occurrence.

Mr. John Grubb, the observer at Winscombe (The Down), gives the following details of the rainfall of August 6th :—

> "The fall of 4·20 in. for the 24 hours beginning at 9h. G.M.T. on the 6th followed a fall of 1·10 in. on the previous day. There were a few showers in the morning of the 6th, but no considerable fall until 22h. when heavy rain began and continued until about 4h. on the 7th, when there was a short break. Fearing that the container of my gauge might get over full, I went out to it soon after 4h. and the amount recorded was 3·66 in., nearly all of which had fallen in six hours. The first six days of August yielded 6·19 in. of rain here."

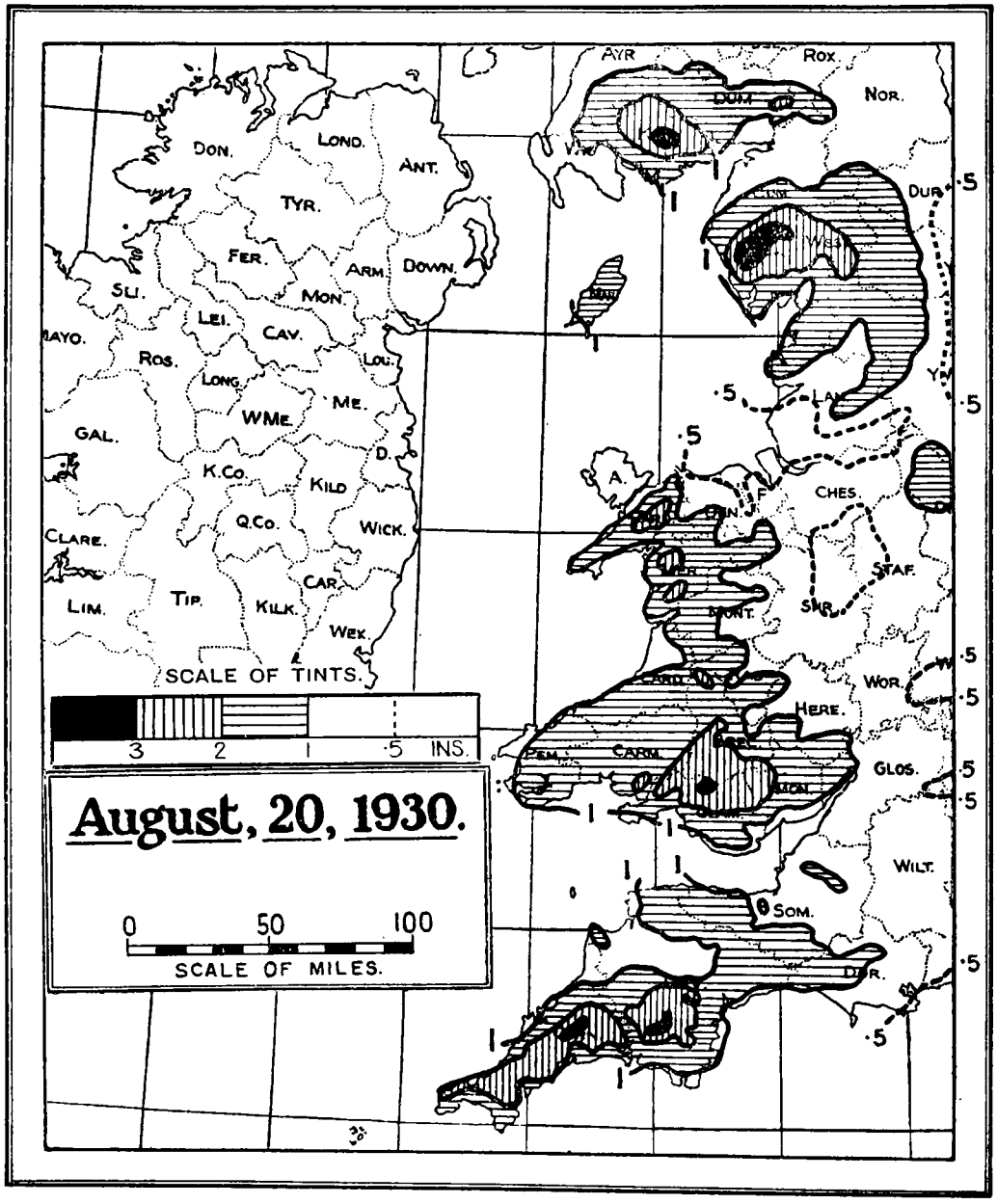
The rainfall of the 6th does not appear to have reached one inch anywhere apart from this region in the Mendip Hills.

August 20th.

S. Devon.	*in.*	or %	*Glamorgan.*	*in.*	or %
Lee Moor Clay Works	3·40	3·5	Felindre (Lower Lliw Res.)	3·00	4·9
Holne (Church Park Cottage)	2·68	3·4	Felindre (Upper Lliw Res.)	3·03	4·2
Dartmoor (Swincombe)	2·95	3·5	Rhondda W.W. (Llyn Fawr Res.)	3·50	3·5
Princetown (Wydemeet)	3·00	3·7	Pontycymmer (Police Stn.)	2·92	3·4
Bovey Tracey (Hedge-barton)	2·50	3·4	Pontycymmer (Garn Sec. School)	2·95	3·5
Christow (Laploydd)	2·53	4·5	Ystradyfodwg (Tyntyla Hos.)	2·67	4·0
Cornwall.			Mountain Ash (Darranlas Res.)	2·92	4·0
Crowan (Boswyn Res.)	2·50	4·3	Mountain Ash (Maesydder-wen)	2·95	4·4
St. Ives (Cemetery)	3·04	5·2	Treherbert (Tyn-y-waun)	3·35	3·3
St. Austell (Trevarna)	2·58	4·4	Cwmaman Collieries	2·72	—
St. Keyne (Locrenton)	2·74	4·3	Rhondda (Castell Nos. Res.)	2·84	3·2
Liskeard (Penmilder)	2·68	4·7	Rhondda (Lluest Wen Res.)	2·57	2·6
Liskeard (Lewarne)	3·16	3·9	Dowlais (Gwernllwyn)	2·63	4·1
Cumberland.			*Brecon.*		
Rosthwaite (The Moraine)	*2·97*	*2·7*	Swansea W.W. (Cray Res.) No. 1	2·77	3·3
Eskdale Green (Gatehouse)	3·02	4·9	*Carnarvon.*		
Beckfoot (Eskdale Vicarage)	3·50	4·8	Snowdon (Cwm Dyli) No. 11	*2·55*	*1·8*
Westmorland.			Snowdon (Llydaw Intake) No. 10	*2·55*	*1·6*
New Dungeon Ghyll Hotel	3·85	3·8	*Kirkcudbright.*		
Kendal (Ellergreen)	2·65	2·6	Threave	3·83	5·4
Kentmere Head Reservoir	2·65	2·7	Dalbeattie (Kirkennan)	2·67	5·0
Monmouth.					
Tredegar Laboratory	2·59	3·8			
Abersychan (Glansychan)	3·03	4·5			
Goytre (Goytre Hall)	2·70	4·7			
Glamorgan.					
Felindre (Blaenant Dhu)	2·70	4·1			

Heavy falls occurred on August 20th at more stations than

on any other day of the year. All these stations recorded an annual rainfall of more than 50 inches. They were situated in the Devon-Cornwall Peninsula, Wales and the English Lake District. The rainfall was associated with an intense and deepening depression



Rainfall 20th August, 1930.

which moved across Ireland during the day and subsequently moved away in an east-north-eastward direction. A map of the rainfall of this day over part of Great Britain is reproduced. The amounts are not unusual for rains of this type, but such rains mainly occur in the winter months.

August 21st

Cumberland.	*in.*	or %	*Westmorland.*	*in.*	or %
Rosthwaite (The Moraine)	3·37	3·1	Patterdale (Greenside Mine)	*2·65*	*2·5*
Buttermere (Hassness)	3·61	3·3	Grasmere (The Wray)	3·00	3·2

Heavy falls on the 21st occurred at only a few stations in the English Lake District, but these stations had already recorded large falls for the previous day. At Rosthwaite the total for the two days, the 20th and 21st, was 6·34 inches, at Buttermere (Hassness) 5·70 inches, at Grasmere (The Wray) 5·31 inches, at Patterdale (Greenside Mine) 4·65 inches.

August 25th.

Argyll.	*in.*	or %	*Mayo.*	*in.*	or %
Inveraray Castle Gardens	3·15	3·7	Aasleagh House	3·01	2·8

At Inveraray Castle the rain fell in a period of 12 hours.

August 27th.

Yorkshire North Riding.—Middleham (Cotescue).....2·58 *in.* or 6·4 per cent.

August 29th.

London.—N. Woolwich Pumping Station.....1·75 *in.* or 7·6 per cent.

The thunderstorms of the 29th followed the remarkable hot spell which set in suddenly after the 25th. Only one entry is given for the rainfall of August 29th, although numerous intense falls in short periods for this day qualify for mention in Section 6. Some details of the severe hailstorm near Peebles are given by Commander Arthur Venables, R.N., in the *Meteorological Magazine*, 1930, pp. 184–5, and some notes on the London storm on pp. 185–6.

September 10th.

London.	*in.*	or %	*London.*	*in.*	or %
Bermondsey (Southwark Park)	2·33	7·9	Camberwell (Nunhead Res.)	2·47	8·7

On the 10th, heavy rain accompanied severe thunderstorms in the south-east of London and in Glasgow.

September 11th.

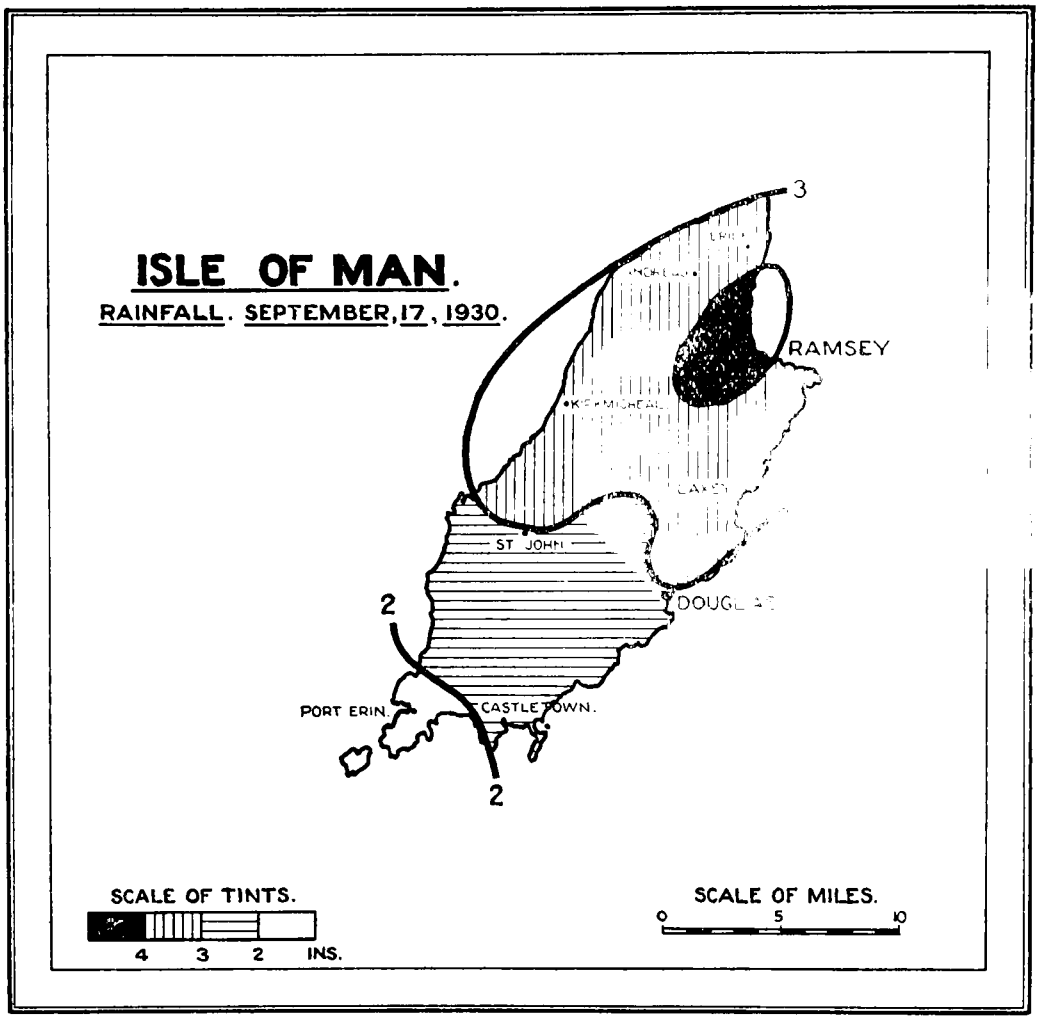
Inverness.—Moidart (Roshven).....2·60 *in.* or 3·2 per cent.

A "cloud-burst" occurred in the early afternoon over Heald Moor, some 2 miles north-east of Bacup.

September 17th.

S. Devon.	*in.*	or %	*Isle of Man.*	*in.*	or %
Lee Moor Clay Works	*2·65*	*2·7*	West Baldwin Reservoir. *New g.*	3·30	4·9
Princetown (H.M. Prison)	2·72	2·8	Ramsey (Town Hall)	4·35	7·7
Isle of Man. Douglas (Boro' Cemetery)	2·72	5·1	Ramsey (North Promenade)	4·32	7·7
Douglas (Clypse Res., Onchan)	3·57	6·5	*Perth.* Dunning (Kippen House)	2·51	5·0
West Baldwin Reservoir. *Old g*	2·85	4·6	Glenfarg (Fordel)	3·88	8·9

The rainfall on September 17th was most striking in the Isle of Man, and a map of the rainfall in that area is reproduced. The heavy rain was associated with an intense secondary depression, which, on the morning of the 18th, was centred over south-east Scotland. The falls of this day were greater than those of any other day for which records are available in the Isle of Man, apart from the 15th September, 1918, when 4·95 inches were recorded at



Rainfall, Isle of Man, 17th September, 1930.

Douglas (Clypse Reservoir) and 4·68 inches at Douglas (Borough Cemetery). The next wettest day was November 6th, 1890, when 3·82 inches were recorded at The Dhoon. At Glenfarg (Perthshire) the rainfall is described as a regular deluge, washing away roads, swamping fields and doing much damage.

September 19th.

Radnor.—Birmingham W.W. (Tynant).....2·65 *in.* or 3·3 per cent.

September 20th.

Cardigan.	*in.*	or %
Abergwesyn (Nantneuadd)	3·27	4·0
Birmingham W.W. (Abergwngu)..	2·65	3·2

Kerry.	*in.*	or %
Kilgarvan (Inchimore)....	*2·56*	*2·3*

September 27th.

Suffolk.—Snape (Wadd House).....2·45 *in.* or 7·7 per cent

Only one entry is given for the heavy rainfall of September 27th and 28th. At Campsea Ashe (near Woodbridge) 3·09 inches were recorded by the Rt. Hon. Viscount Ullswater for the 24 hours commencing 18h. on the 27th; extensive floods occurred in the neighbourhood and in many places roads became impassable. At Snape (Wadd House) the total for the two days was 3·74 inches, at Snape (Green Heys) 3·48 inches, at Melton (Bromeswell Rectory) 3·23 inches, and at Woodbridge Abbey, 2·85 inches, but the heavy rain was very local. In the Norwich district the heavy rain was on the 26th and 27th and slightly exceeded two inches.

October 4th.

Carnarvon.—Snowdon (Cwm Dyli) No. 11.....*2·68 in.* or *1·9* per cent.

October 14th.

Carnarvon.—Snowdon (Llydaw Intake) No. 10.....*2·90 in.* or *1·8* per cent.

October 15th.

Cumberland.—Buttermere (Hassness).....*2·77 in.* or *2·6* per cent.

October 18th.

Argyll.—Ardgour House.....*2·61 in.* or *2·5* per cent.

October 29th.

Yorkshire W. Riding.—Slaidburn (Whitendale).....2·60 *in.* or 3·7 per cent.

November 1st.

Carnarvon.—Snowdon (Cwm Dyli) No. 11.....*2·50 in.* or *1·8* per cent.

The total rainfall at Snowdon (Cwm Dyli) for the two days, November 1st to 2nd, amounted to 3·90 inches, and at Snowdon (Llydaw Intake) 4·10 inches.

November 7th.

Carnarvon.—Snowdon (Cwm Dyli) No. 11.....*2·63 in.* or *1·9* per cent.

November 8th.

Argyll.	*in.*	or %
Ardgour House.....	3·18	3·1
Glenleven (Kinlochleven)..	2·73	2·7
Dalmally (Manse of Glenorchy)	3·20	3·8
Bridge of Orchy (Inveroran)	2·53	3·1
Glenbranter	2·61	2·9

Inverness.	*in.*	or %
Loch Quoich (Kinloch-quoich).	*3·00*	*2·5*
Loch Quoich (Glenquoich).	*2·64*	*2·3*
Ross and Cromarty.		
Glenmoriston (Cluanie Inn)	2·50	2·3

November 9th.

Argyll.	*in.*	or %
Glen Etive	2·50	2·4

Inverness.	*in.*	or %
Kinlochleven (Kinlochmore Lo.)	2·56	2·7

November 12th.

Ross and Cromarty.	*in.*	or %
Loch Carron (Dunhulladale)	3·01	3·9

Inverness.	*in.*	or %
Loch Quoich (Glenquoich)	3·32	2·8

November 14th.

Inverness.—Loch Quoich (Kinlochquoich).....3·73 *in.* or 3·2 per cent.

November 18th.

Carnarvon.	*in.*	or %
Snowdon (Cwm Dyli) No. 11	*2·79*	*1·9*
Snowdon (Llydaw Intake) No. 10	*2·90*	*1·8*

Down.	*in.*	or %
Mourne Mountains (Fofanny Res.)	*2·71*	*3·1*

November 21st.

Carnarvon.	*in.*	or %
Snowdon (Cwm Dyli) No. 11	*2·72*	*1·9*

Carnarvon.	*in.*	or %
Snowdon (Llydaw Intake) No. 10	*3·00*	*1·9*

November 24th.

Argyll.—Glencroe (Guithas Cottage).....2·52 *in.* or 2·6 per cent.

The falls of November 8th, 9th, 12th and 14th were confined to Scotland.

December 7th.

Lancashire.—Horwich (Loco. Works).....2·60 *in.* or 4·6 per cent

December 10th.

S. Devon.	*in.*	or %
Lee Moor Clay Works	*2·62*	*2·7*
Down.		
Annalong (Belfast W.W.)	2·57	4·1

Down.	*in.*	or %
Mourne Mountains (Fofanny Res.)	4·10	4·7

December 14th.

Inverness.—Loch Quoich (Kinlochquoich).....*3·00 in.* or *2·5* per cent.

December 28th.

Cumberland.	*in.*	or %
Rosthwaite (The Moraine)	*3·25*	*3·0*
Buttermere (Hassness)	*3·02*	*2·8*
Westmorland.		
Grasmere (The Wray)	3·00	3·2
Carnarvon.		
Lake Eigiau (Dam Site)	3·53	3·9
Tyn-y-Groes (Dolcrwm)	2·98	5·0

Carnarvon.	*in.*	or %
Bethesda (St. Ann's Vicarage)	2·78	3·9
Bethesda (Penrhyn Quarries)	2·94	3·9
Snowdon (Cwn Dyli) No. 11	2·82	2·0
Snowdon (Llydaw Intake) No. 10	*3·20*	*2·0*

The heavy rain of December 28th in the English Lake District and North Wales was associated with a deep depression which passed well to the north of Scotland during the day.

8. MONTHLY RAINFALL IN 1930.

Information as to the rainfall of the months of 1930 is set out in this section in various forms :—

(1) Table XIX gives generalized values of the monthly and annual rainfall over the British Isles as a whole and also over the constituent countries separately.

(2) On page 75 details are given of some of the largest and smallest monthly totals of rainfall reported during 1930.

(3) In Table XX the monthly and annual totals of rainfall are set out for 400 stations, distributed evenly over the British Isles.

(4) Table XXI gives the monthly and annual falls expressed as percentages of the averages for 1881 to 1915. It is confined to 150 stations, uniformly distributed over the British Isles, for which averages are available. At the end of this table, general monthly and annual percentage values are given for the British Isles and for each of the constituent countries.

(5) A set of twelve maps showing the distribution of the actual rainfall in each month, is reproduced in this article. A thirteenth map on a larger scale depicting the distribution of rainfall for the whole year is also reproduced. These maps were originally drawn on the much larger scale of 19 miles to the inch, and values from as many as possible of the 5000 separate stations were plotted on each map before the isohyetal lines were drawn. Details which would tend to confuse the maps on the small scale of the reproductions have been eliminated.

(6) A second set of twelve maps showing cartographically the distribution of the percentage monthly values given in Table XXI and in the rainfall table published month by month in the *Meteorological Magazine* is also reproduced in this article. The corresponding percentage map for the whole year appears later in Section 10.

General Monthly Rainfall.

The general monthly values given in Table XIX have been computed by applying the percentage values given at the end of Table XXI to the average general values for the period 1881 to 1915. These computed values have been subsequently slightly adjusted in order that the totals for the year should agree with the totals given

in Table XXIII which are based on a more exact determination as explained in the text accompanying that table.

Table XIX.—*General Rainfall for* 1930, *computed from the average,* 1881–1915, *by applying the general percentage values given in Tables XXI and XXIII to the General Average Values.*

	England.	Wales.	England and Wales.	Isle of Man.	Scotland.	Ireland.	British Isles.
	in.	in.	in.	in.	in.	in.	in.
January	4·5	8·8	5·1	6·5	6·4	6·4	5·9
February	1·1	0·8	1·1	0·7	1·2	1·0	1·2
March..	2·4	4·0	2·6	3·2	3·1	4·7	3·3
April	2·7	3·6	2·8	2·3	2·5	2·1	2·7
May	2·3	2·5	2·4	2·2	2·3	2·0	2·3
June	1·3	2·0	1·4	2·4	3·0	2·6	2·1
July...	4·1	4·6	4·2	3·0	3·5	4·0	4·0
August	4·1	6·2	4·4	6·5	7·6	6·5	5·7
September	4·4	5·6	4·6	6·2	5·4	4·5	4·9
October	3·0	7·8	3·6	8·2	7·3	6·8	5·4
November	4·8	6·8	5·2	6·3	7·0	4·8	5·6
December	3·5	7·3	4·0	7·1	5·3	5·0	4·6
Year	38·2	60·0	41·4	54·6	54·6	50·4	47·7

It is shown in Table XIX that the general monthly rainfall over the British Isles as a whole, varied from 1·2 inches in February to 5.9 inches in January.

The rainfall of January, 1930, was greater than that of any January back to 1877, with the exception of January 1928, when the general fall was 7·2 inches. The Januarys of 1875 and 1872 were also wetter than that of 1930. On the other hand February was drier than any other February in the series back to before 1870, apart from those of 1921, 1895 and 1891. The rainfall of August was exceeded only in four years, and that of September in nine years. The total rainfall for August and September was 10·6 inches, which was exceeded only in 1927 and 1918 with 11·8 inches and 10·7 inches respectively. It is worthy of comment that the rainfall of the four months October 1929 to January 1930 amounted to 27·0 inches, or as much as 10·1 inches in excess of the average. These four months were wetter than any similar period since before 1870, the next wettest period being October 1876 to January 1877 with 25·2 inches.

August 1930 was the fourth successive wet August and November the fifth wet November over the country generally.

Table XIX shows that February was the driest month in each

country. The next driest month was June in England and Wales, and May in the Isle of Man, Scotland and Ireland. The wettest month was January in Wales, August in Scotland, October in the Isle of Man and Ireland, and November in England.

The corresponding general monthly percentage values are given at the end of Table XXI. There were only four months, February, May, June and December in which the general precipitation over the British Isles was below the average. The deficiency was greatest in February and the excess greatest in January and September. The period February to July was noteworthy for the deficiency of rainfall in Scotland, while there was a remarkable run of five wet months from July to November in Ireland.

Extremes of Monthly Rainfall at Individual Stations.

(*a*) *Monthly Totals.*—More than 30 inches were recorded in both January and October in the English Lake District. The largest totals were 30·57 inches in January and 30·50 inches in October at Borrowdale (Stye Head). As much as 28·70 inches was recorded in October on Snowdon and 24·42 inches at Kilgarvan (Inchimore) in Co. Kerry in January.

On the other hand only a tenth of an inch was recorded in February in parts of Dumfriesshire and western Ayrshire and in June in parts of South Devon. Some of the smallest totals were :—

	in.
February.	
Dumfries, Lockerbie (Castle Milk)	·08
Ayr, Troon	·09
Ayr, Ardrossan (Burnfoot)	·12
June.	
S. Devon, Torquay (Cary Green)	·12
,, Axminster (Lea Combe House)	·13
,, Budleigh Salterton (West Ways) ..	·13
,, Honiton (Beech Grove)	·13

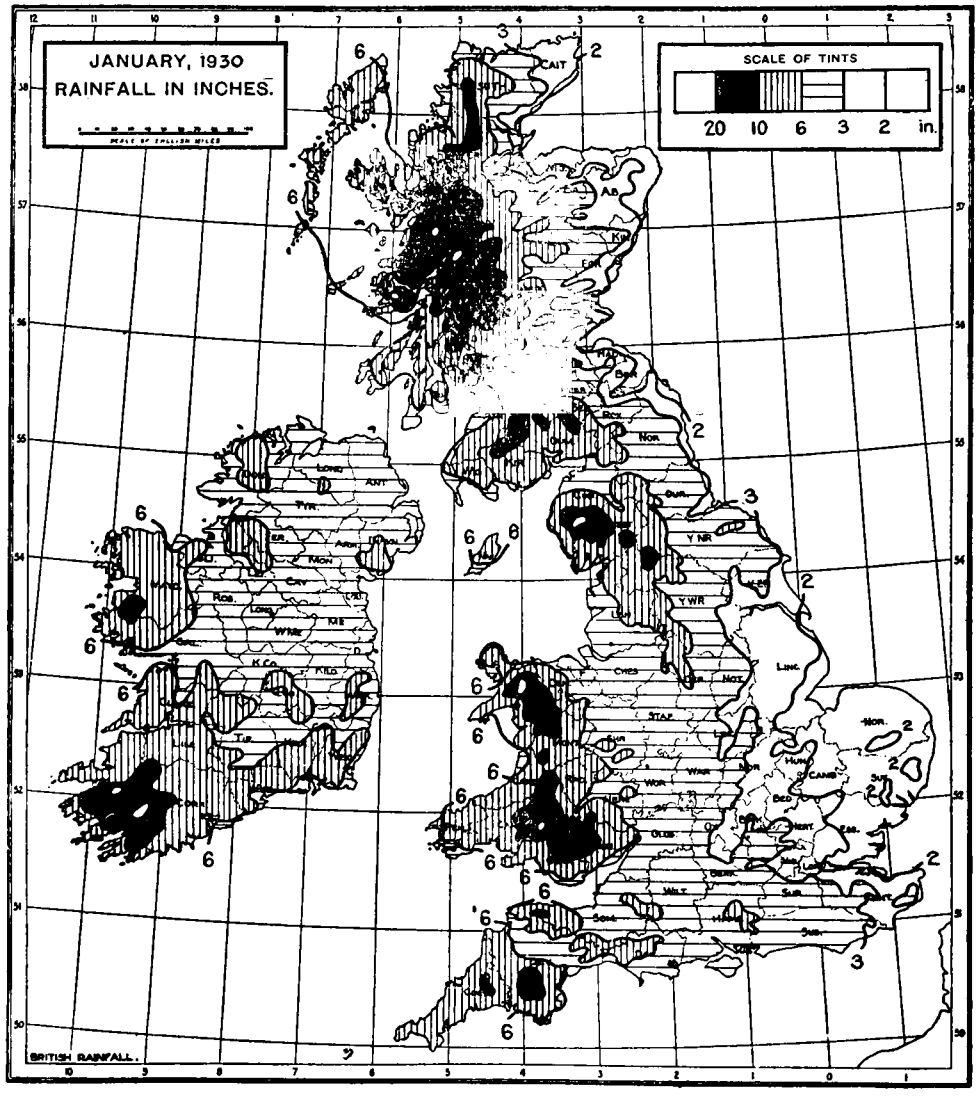
(*b*) *Monthly percentage totals.*—Monthly totals of more than three times the average were recorded in September near Dublin and in east Suffolk, as much as 357 per cent. being recorded at Dublin (Fitzwilliam Square) and 334 per cent. at Rendlesham Hall, near Woodbridge. Other large values were :—282 per cent. at Balbriggan (Ardgillan) in September, 276 per cent. at Lilburn Tower, Northumberland in July, and 268 per cent. at Lowestoft in September.

The smallest percentage values occurred in the south-west of Scotland in February. There was only 6 per cent. at Dumfries, 7 per cent. at Shaws W.W. (Loch Thom), Kilmarnock, Girvan (Pinmore), Dalry (Glendarroch). 7 per cent. was also recorded at Llandwrog (Glynllivon Park) in Carnarvonshire.

The Rainfall and Weather of the Individual Months.

*** Maps showing the distribution of mean pressure and the movements of the centres of depressions for each month are published in the *Monthly Weather Report.*

January.—Unsettled conditions persisted during January. During the first fortnight there were frequent gales. The predominating winds were southerly to south-westerly and in almost all districts the mean temperature for the month exceeded the average. There

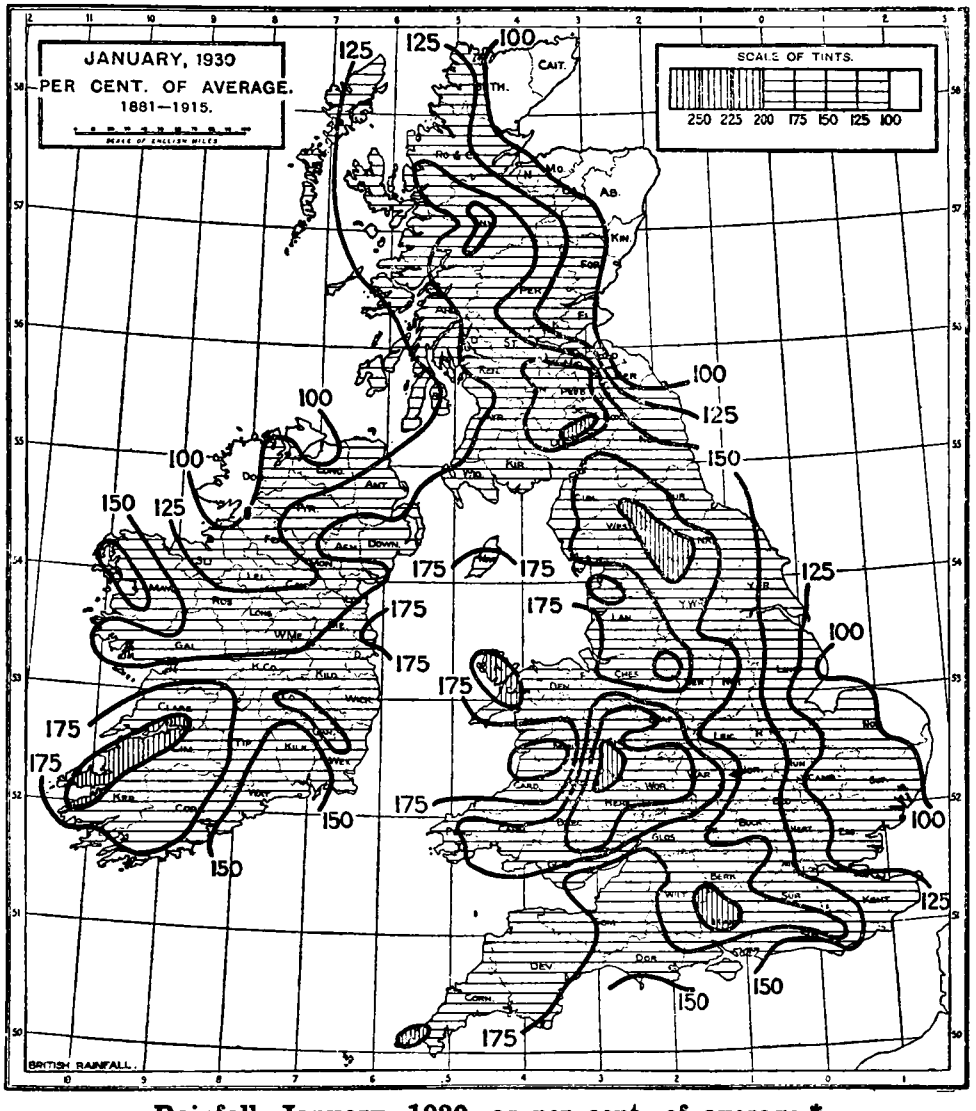


Rainfall, January, 1930.

were frequent fair intervals, especially in northern districts where sunshine aggregates in general were in excess of the average.

The mean pressure for the month was everywhere below the average, the deficiency varying from 15 mb. at Stornoway to 8 mb. at Yarmouth. As is usually the case in months of low mean pressure, the rainfall was in excess of the average. In January 1930 the excesses occurred in the west rather than the east of Great Britain, the usual state of affairs with an increased pressure gradient from the north

to the south. In Scotland there was a marked contrast between the rainfall recorded in central districts and in the west, *e.g.* 180 per cent. of the average at Fort Augustus, and that recorded in the east, *e.g.* 77 per cent. at New Deer in Aberdeenshire. In England 264 per cent. was recorded at Church Stretton in Shropshire, 220 per cent. at Leyburn in Yorks. N.R. and 217 per cent. at Penzance compared with 97 per cent. at Norwich. The variation in the number of days



Rainfall, January, 1930, as per cent. of average.*

with rain was also remarkable in Scotland, there being 29 in the west and only 13 at Fortrose (see Section 2).

The percentage map shows that the rainfall was less than the average along the east coast of Great Britain and along the north coast of Ireland. On the other hand more than twice the average occurred in part of Roxburghshire, over part of the Pennines, over a large area stretching from Pembroke to Staffordshire and Warwickshire, in Anglesey, Snowdonia, near Alresford, Hants., and Penzance, and from Valentia to Foynes in the south-west of Ireland.

*The area within the closed line extending from Pembroke to Stafford should have the second tint (i.e. rainfall above 200 per cent.).

February.—Unsettled conditions continued during the first five or six days of February. Subsequently anticyclonic conditions prevailed, with a preponderance of north-easterly to easterly winds. The weather was mainly fair, quiet and cold, with a pronounced deficiency of rainfall, especially in the west of Scotland, and plentiful sunshine in the north and west.

Unlike January, the mean pressure for the month exceeded the

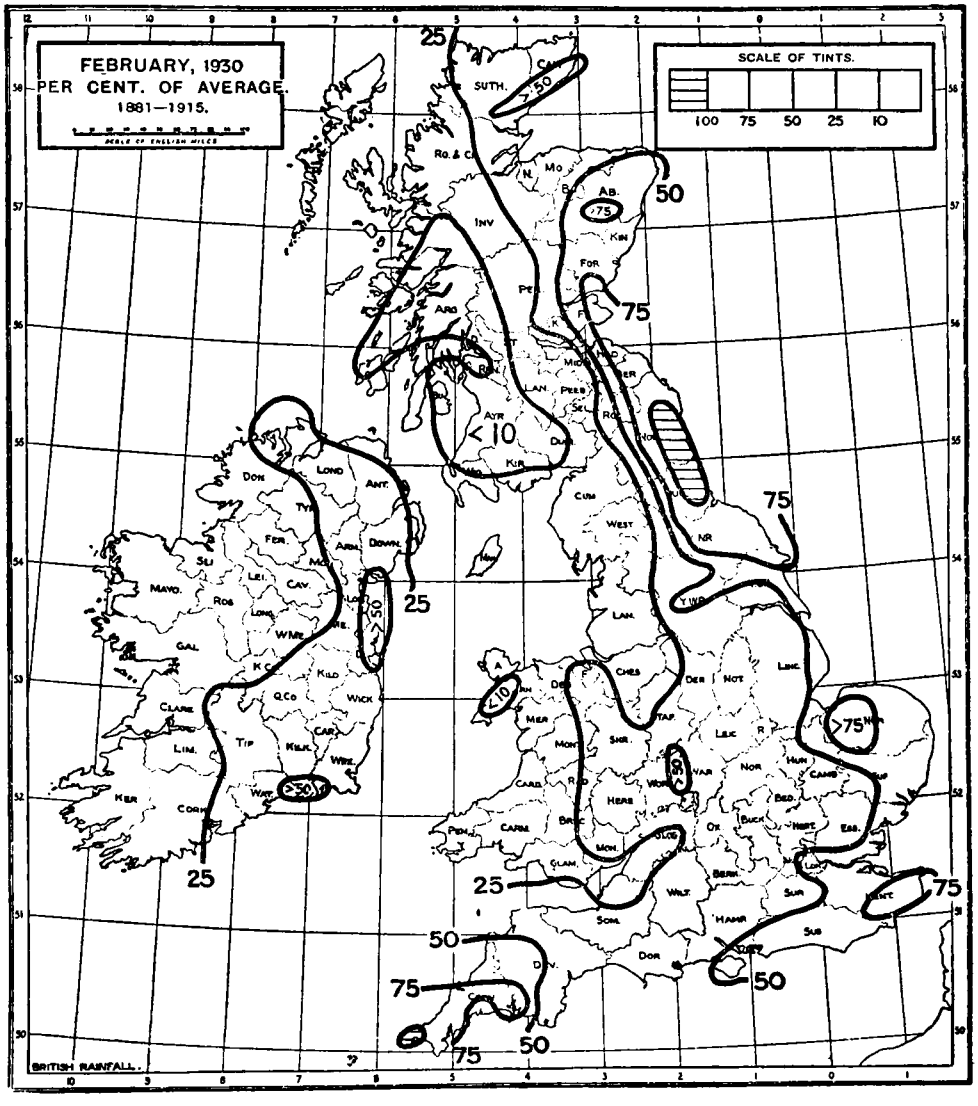
Rainfall, February, 1930.

average everywhere, the excess ranging from 15 mb. at Lerwick to 2 mb. at Dungeness. There was a complete reversal of the normal pressure distribution, the mean pressure increasing from south to north. At Southport north-easterly winds were more prevalent than in any previous month of any name, and easterly winds more prevalent than in any previous February since the establishment of the Observatory in 1871. The month was also the calmest February experienced.

The total rainfall for the month was greatest along the east

coast of Great Britain and in Cornwall. In Cornwall the preponderance of heavy rain occurred during the first four days of the month, while along the east coast there were small falls later during the month.

Falls of more than the average were confined to parts of Durham and Northumberland and to the neighbourhood of Penzance. On the other hand there was less than one quarter of the average over



Rainfall, February, 1930, as per cent. of average.

the western half of Scotland, to the west of the Pennines, over most of Wales and in the western half of Ireland. The large area in Scotland, stretching from Fort William to Dumfries, with less than 10 per cent. of the average, calls for special comment.

The map of the rainfall in actual inches is unusual, not only because of the large area with less than half-an-inch, but also because of the location of these areas in the west of Great Britain and of Ireland.

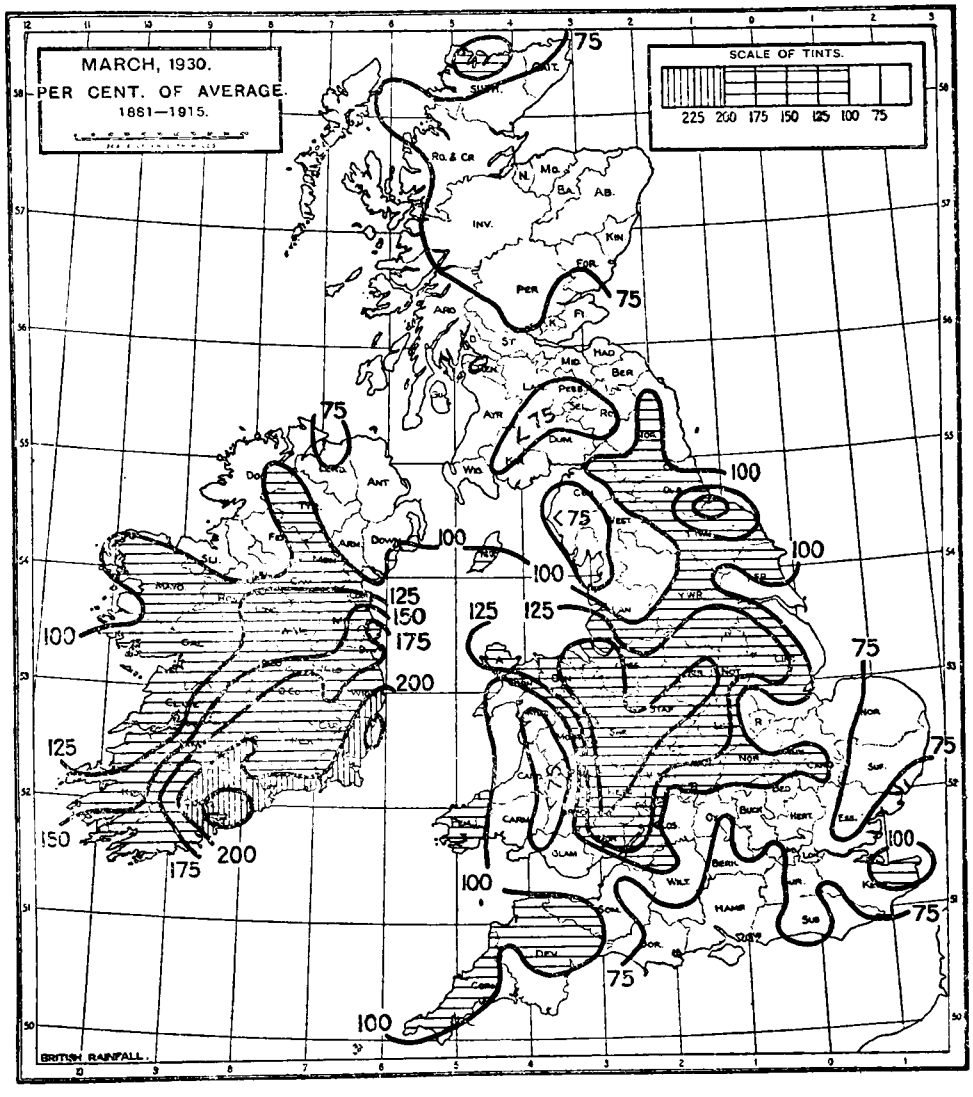
March.—The weather during March was on the whole unsettled; depressions and associated secondaries frequently passing across or in the neighbourhood of the British Isles. Mild conditions prevailed during the first and last few days of the month with an intervening spell of unsettled wintry weather with much precipitation, frequently in the form of hail, snow and sleet. The mean temperature for the month was generally very close to the average, being rather above

Rainfall, March, 1930.

in the east and south of England and below in Scotland. About the middle of the month unusually low readings were recorded and snow fell frequently. In Birmingham snow fell to a depth of 7½ inches on the 15th. In parts of eastern Kent from 5 to 6 inches of snow fell on the 19th, while in Scotland falls of 9 or more inches were common.

The mean pressure for the month was below the average everywhere, although the deficiencies were small, ranging generally from 1 mb. to 3 mb.

The percentage map indicates that there was less than 75 per cent. of the average over the greater part of Scotland, the English Lake District, central Wales, East Anglia, a large area in the south of England, and in Co. Londonderry. There was an unusually steep gradient between Llangurig (Dernol) in central Wales with 66 per cent. and Church Stretton (Wolstaston) with 173 per cent. Usually



Rainfall, March, 1930, as per cent. of average.

Dernol is more than twice as wet as Wolstaston in March but in 1930 Wolstaston recorded 3·85 inches or ·58 inch. more than Dernol. Falls of twice the average were confined to the south-east of Ireland. The totals of 232 per cent. at Cork and of 229 per cent. at Gorey (Courtown House) were due to rain on 22 days which was heavy on the 4th, 9th, 14th, 15th, 30th and 31st.

April.—The outstanding feature of the weather of April was the lack of sunshine, especially in the east of Great Britain. There was a marked prevalence of northerly and easterly winds. The mean temperature for the month exceeded the average in most districts, due mainly to mild cloudy nights and a spell of warm weather during the last six days.

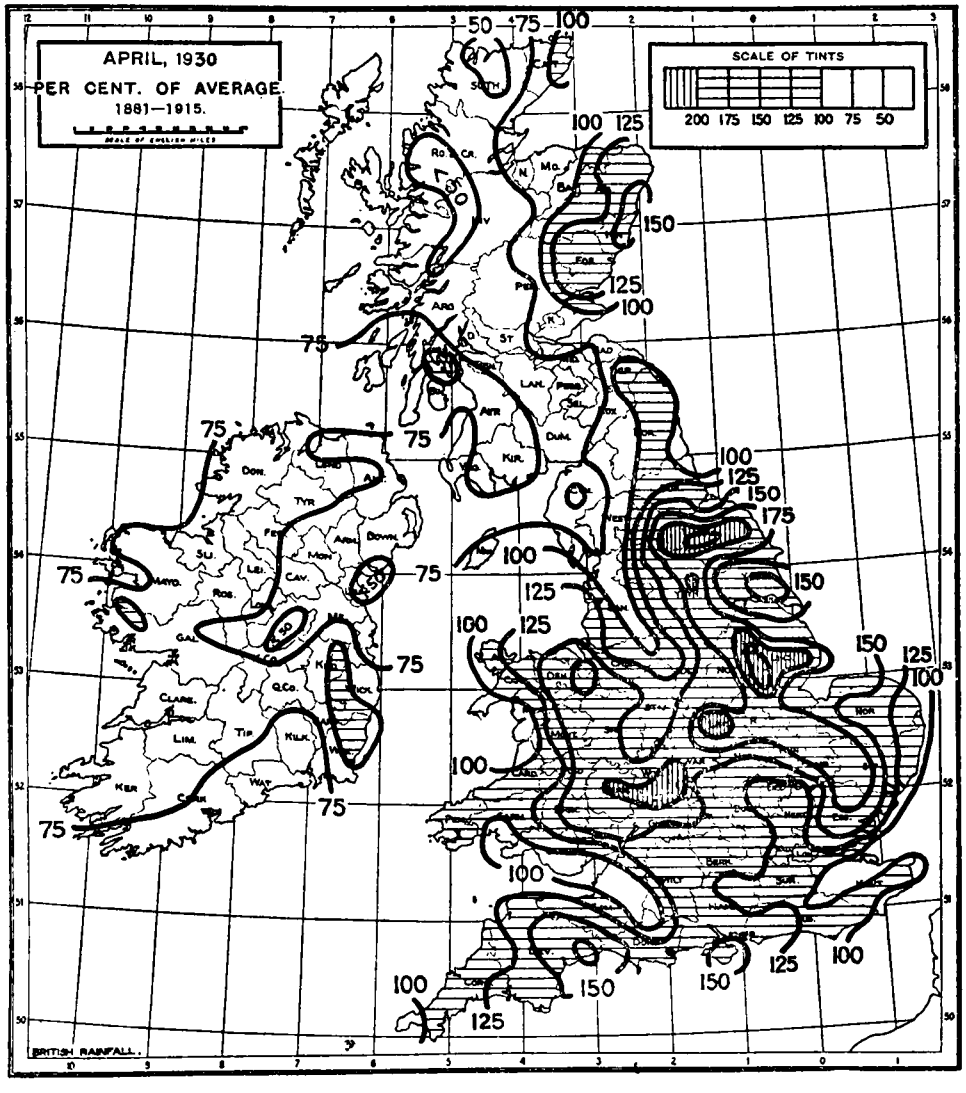
The mean pressure for the month was practically everywhere

Rainfall, April, 1930.

below the average. The departures from the average varying from +0·4 mb. at Lerwick to −5·8 mb. at Portland Bill. The usual pressure gradient was, therefore, reversed, as in February 1930.

The percentage rainfall map for April resembled that for February in that the largest values occurred along the east coast of Great Britain and Ireland. April was, however, much wetter than February owing to the greater number of depressions which passed across or near the country in April.

There was less than half the average rainfall over much of northern Scotland and in Co. Louth and Westmeath. Falls of more than twice the average were confined to England and occurred in Yorkshire, N.R., Leicester and Lincolnshire. The largest percentage values occurred at Felixkirk (Mount St. John) and Lincoln (Skellingthorpe Hall) of 255 and 236 per cent. respectively. Rain occurred at these two stations on about 20 days but no individual fall exceeded ·84 inch.



Rainfall, April, 1930, as per cent. of average.*

The total rainfall during the month at these usually dry stations was between two and three times that recorded at Keswick.

It has been pointed out before that the English Lake District and the Western Highlands of Scotland often experience similar percentage rainfall amounts. That was the case in April 1930. In both regions strong south-west winds were infrequent.

*The rainfall in the south of Worcester exceeded 175 per cent. and not 200 per cent. as indicated.

May.—The month was generally dull and rather dry. There was, however, a small excess of sunshine in the west of Scotland and in the north-west of Ireland. Conditions varied during the month. The warm and cold spells, however, generally neutralised one another, so that the mean temperature in most districts differed little from the average. The mean pressure was generally from 1 to 1½ mb. below the average in England and Scotland and practically normal

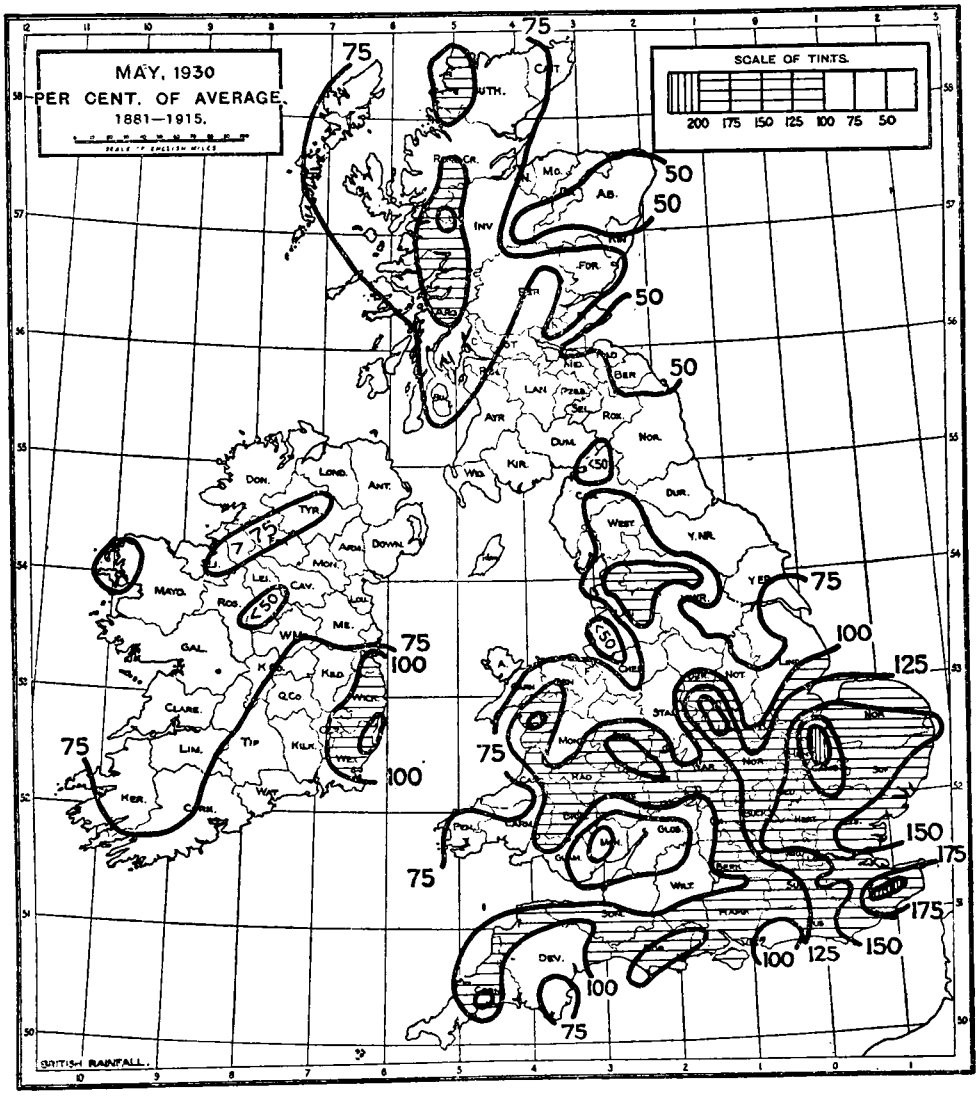
Rainfall, May, 1930.

in Ireland. The number of depressions which passed near or across the country was less than usual, and most of these passed over the southern half of the country or over France.

The rainfall as shown by the percentage map is rather more irregular than usual. Thus in England there was less than half the average near the Solway Firth, in Monmouthshire and south-west Lancashire, while more than twice the average occurred to the south of the Wash and at Tenterden. In the first three districts no day

received more than ·30 inch, whereas heavy rain occurred on the 5th and 6th in Cambridgeshire and on the 30th at Tenterden.

In Scotland the distribution as shown by the percentage map was similar to January and unlike that of February, March or April. There was less than half the usual rainfall over much of the east coast and more than 125 per cent. in the Western Highlands. Of the total of 7·31 inches at Loch Quoich (Glenquoich) as much as



Rainfall, May, 1930, as per cent. of average.

3·94 inches fell on the 17th and 18th, when a deep depression skirted the north-west of Scotland, giving strong south-west winds. At Aberdeen the total for the month was ·99 inch and the rainfall of these two days only ·15 inch.

In Ireland the rainfall varied from 41 per cent. at Blacksod Point in the north-west of Co. Mayo to 127 at Gorey (Courtown House). The large total at the latter station was due mainly to the heavy rain of the 30th.

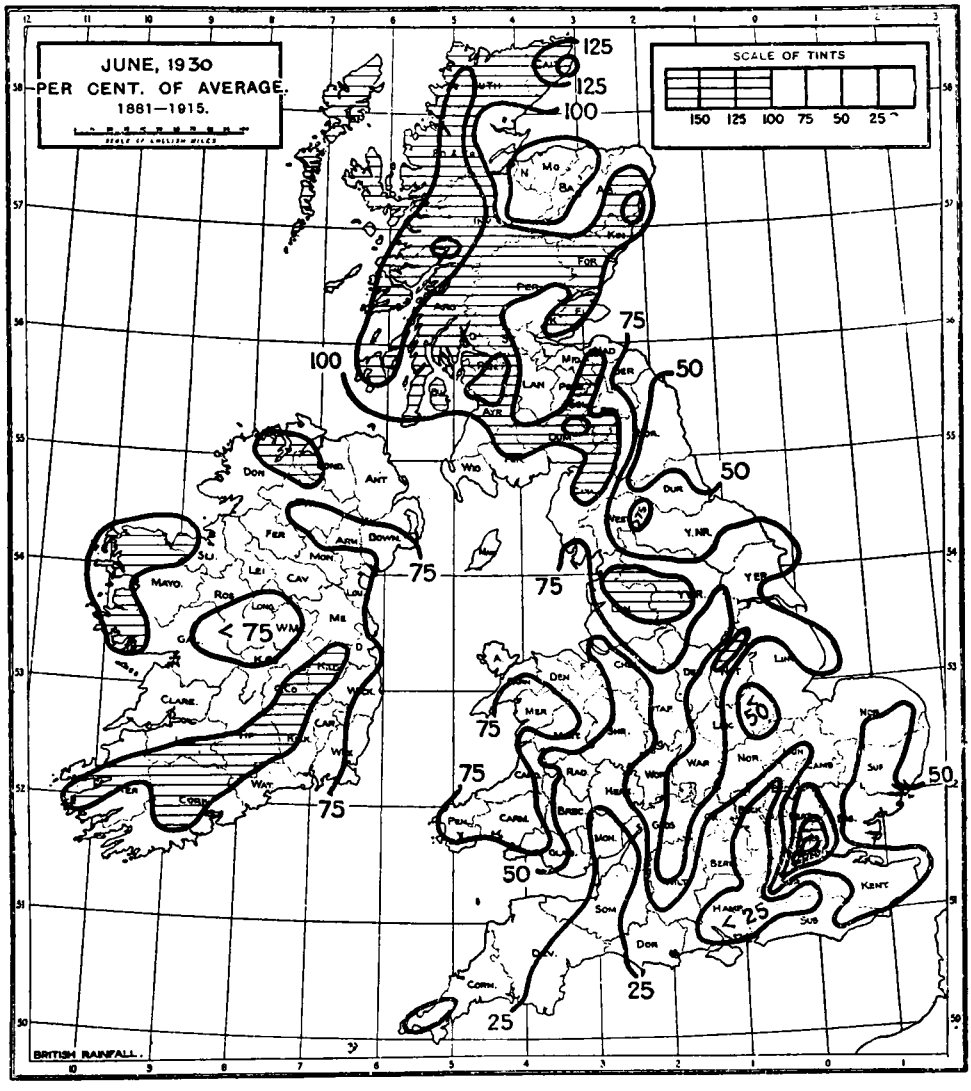
June.—On the whole was sunny and warm. In spite of severe thunderstorms, especially on the 17th and 18th, there was a deficiency of rainfall over most of the country. A conspicuous feature of the weather was the persistence of thundery conditions especially in the latter half of the month. Details of intense rains are given in Section 6 for the 2nd, 9th, 13th, 17th, 18th and 22nd.

Rainfall, June, 1930.

The mean pressure for the month was below the average except in the south and south-east where it was about normal.

The rainfall over England and Wales varied from less than 25 per cent. of the average over a broad strip stretching from Monmouth to Plymouth and Weymouth, to 157 per cent. at Camden Square in north London. At Abergavenny, in Monmouthshire, rain fell on only 7 days and the largest amount recorded was ·10 inch. At Ashburton rain fell on 5 days with a maximum amount of ·15 inch.

At Camden Square the total duration of the rainfall during the month was about the same as at Plymouth, *viz.*: 16 hours, but the mean rain per hour at Camden Square was ·20 inch as compared with ·043 inch at Plymouth (see Section 5). On the 2nd as much as 1·36 inch fell at Camden Square in 114 minutes (see Section 6). Perhaps the most striking fall was that of the 18th when the Ascot race-course



Rainfall, June, 1930, as per cent. of average.

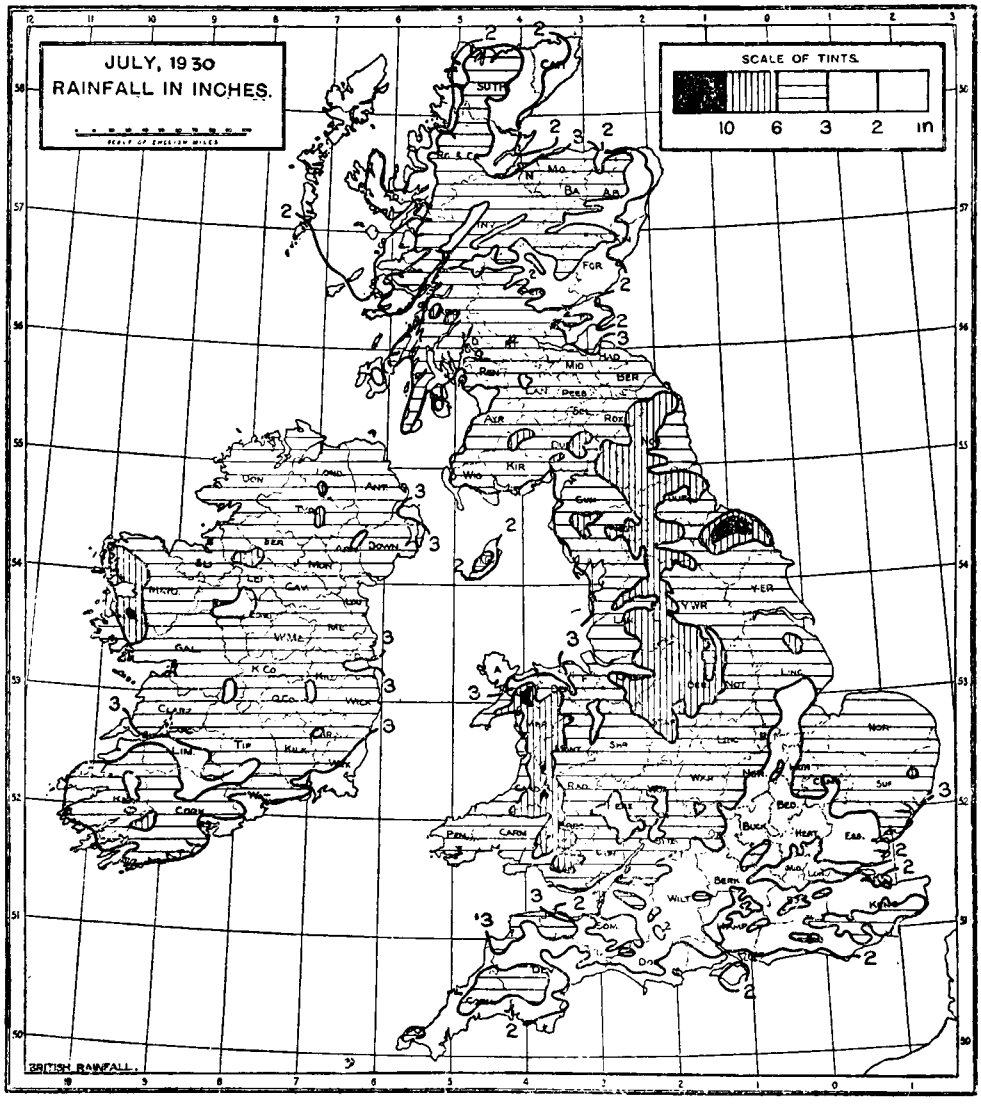
was flooded and the racing abandoned for the first time on record.

Over Scotland the rainfall varied from less than 75 per cent. to the north of the Grampians and near Berwick-on Tweed to 177 per cent. at Wick and 167 per cent. at Fort William. At Wick the wettest day was the 28th with ·75 inch.

As is usually the case, the variation over Ireland was smaller than that over the other countries, ranging only from 60 to 123 per cent.

July.—In contrast to the warm, sunny and mainly dry weather of the previous month, July was generally dull. Depressions passed frequently across the British Isles and there were numerous thunderstorms in the eastern and central districts of Great Britain. Northerly to north-westerly winds prevailed with notable frequency during the month.

Over England the rainfall varied from rather less than 75 per

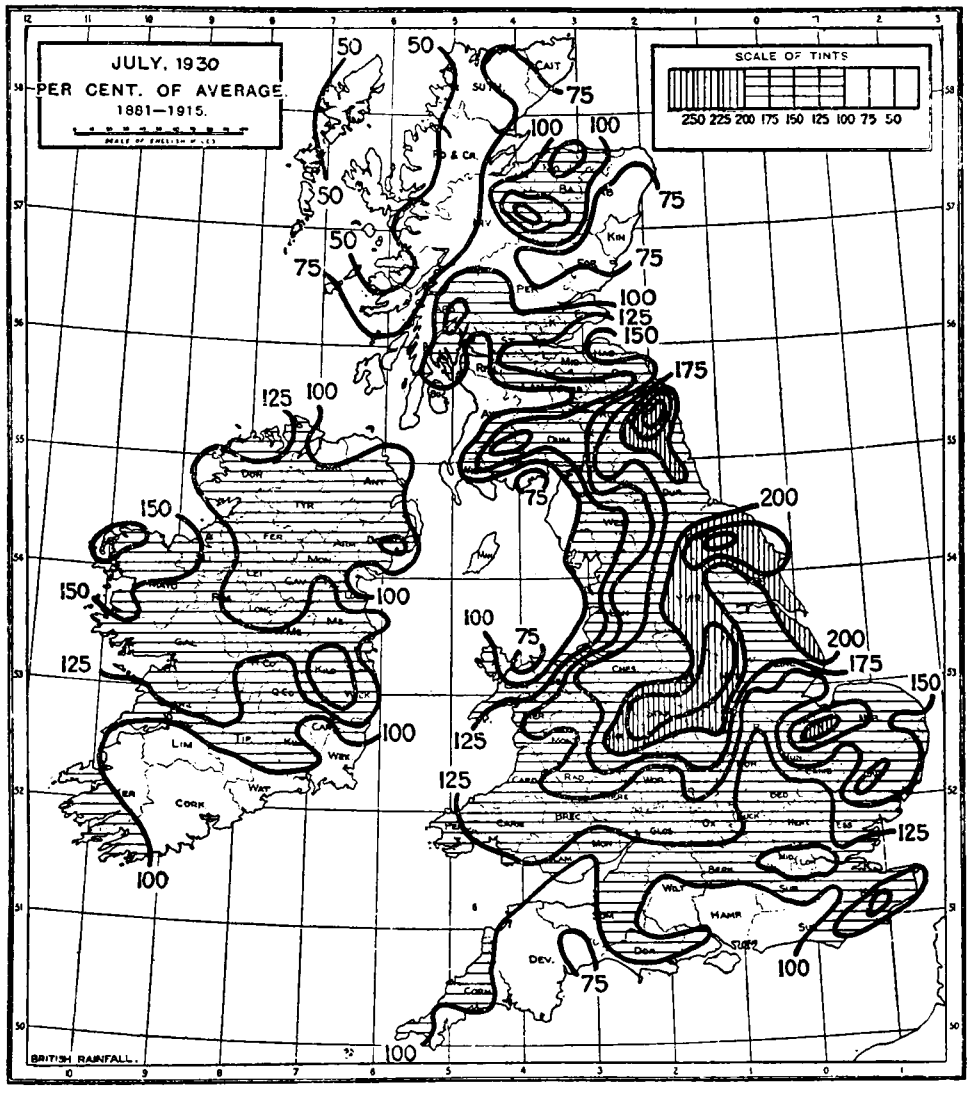


Rainfall, July, 1930.

cent. in the east of Devonshire and near Llandudno, to over 200 per cent. over a large area stretching from Shropshire to Whitby and to the south of the Wash and in Northumberland. The largest percentage values were 276 at Ilderton (Lilburn Tower) and 252 at Felixkirk, corresponding to a rainfall of 6·83 inches and 6·89 inches respectively. At Lilburn Tower 1·71 inch was recorded on the 16th and 17th and 2·68 inches on the 21st and 23rd. At Felixkirk the total rainfall was more concentrated on particular days, 2·28 inches

occurring on the 14th to 16th and 3·11 inches on the 20th to 22nd. The heavy rainfall of the 20th to 23rd in the north and east of England was occasioned by an almost stationary depression off the east coast. The rainfall of these days was most striking in the Yorkshire Wolds, as much as 11·97 inches being recorded at Castleton during the four days (see Section 7).

In Scotland the rainfall varied from less than 50 per cent. in the

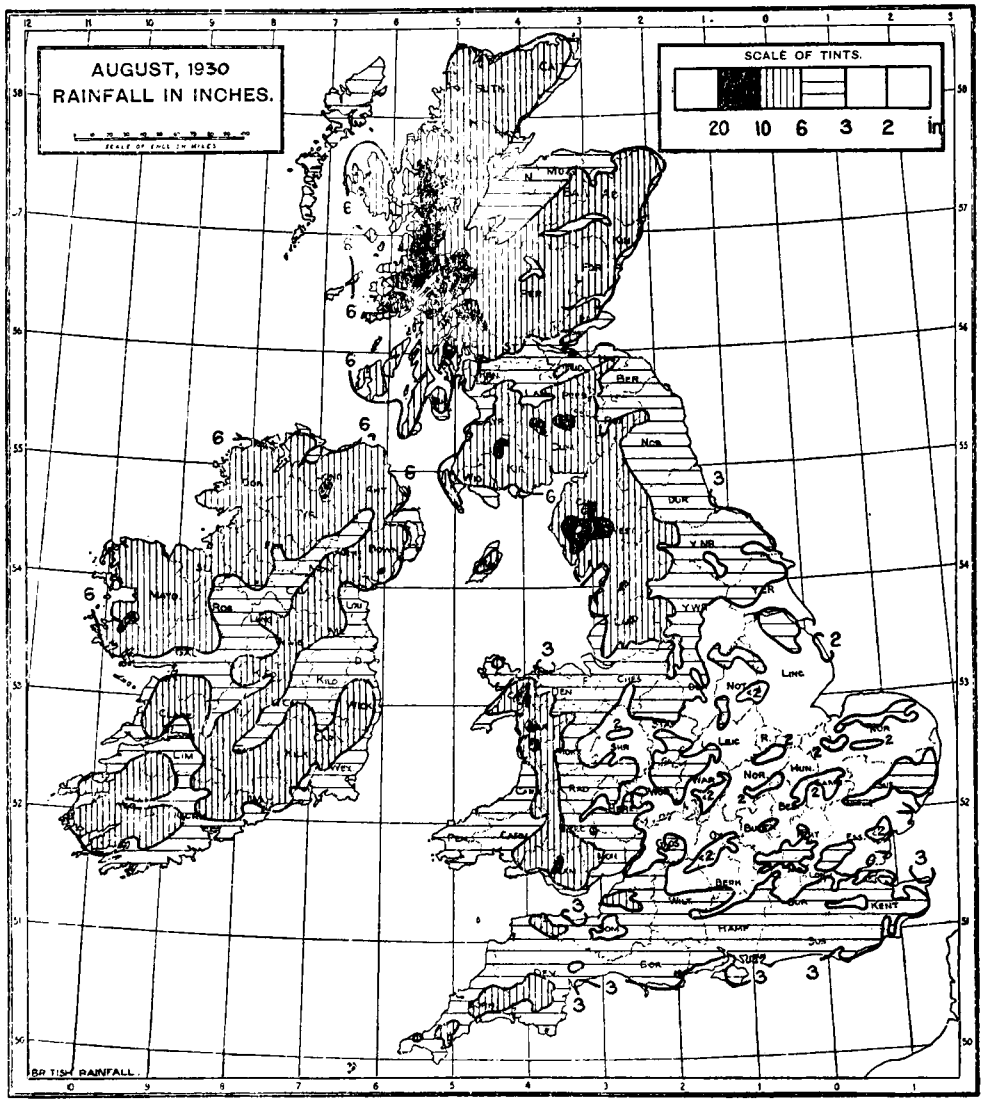


Rainfall, July, 1930, as per cent. of average.

north-west to over 150 per cent. in small areas in eastern Inverness-shire, Kirkcudbrightshire and Haddingtonshire. At Alvie Manse, near Aviemore in Inverness-shire, the total was 3·93 inches or 157 per cent. of the average, but there were no outstanding wet days and practically no rain fell during the period July 20th to 23rd.

In Ireland there was less than the average over much of the south and more than 175 per cent. in the north-west of Co. Mayo.

August.—Apart from a brief spell of brilliant warm weather during the last week of the month, August was unsettled, wet and mostly cool. A remarkable feature was the warm spell which set in rather suddenly after the 25th. In many parts of central and eastern England, maximum temperatures of 90°F. and over were recorded. So hot a spell during the last week in August has not been experienced since 1906. The rise of temperature reached Scotland



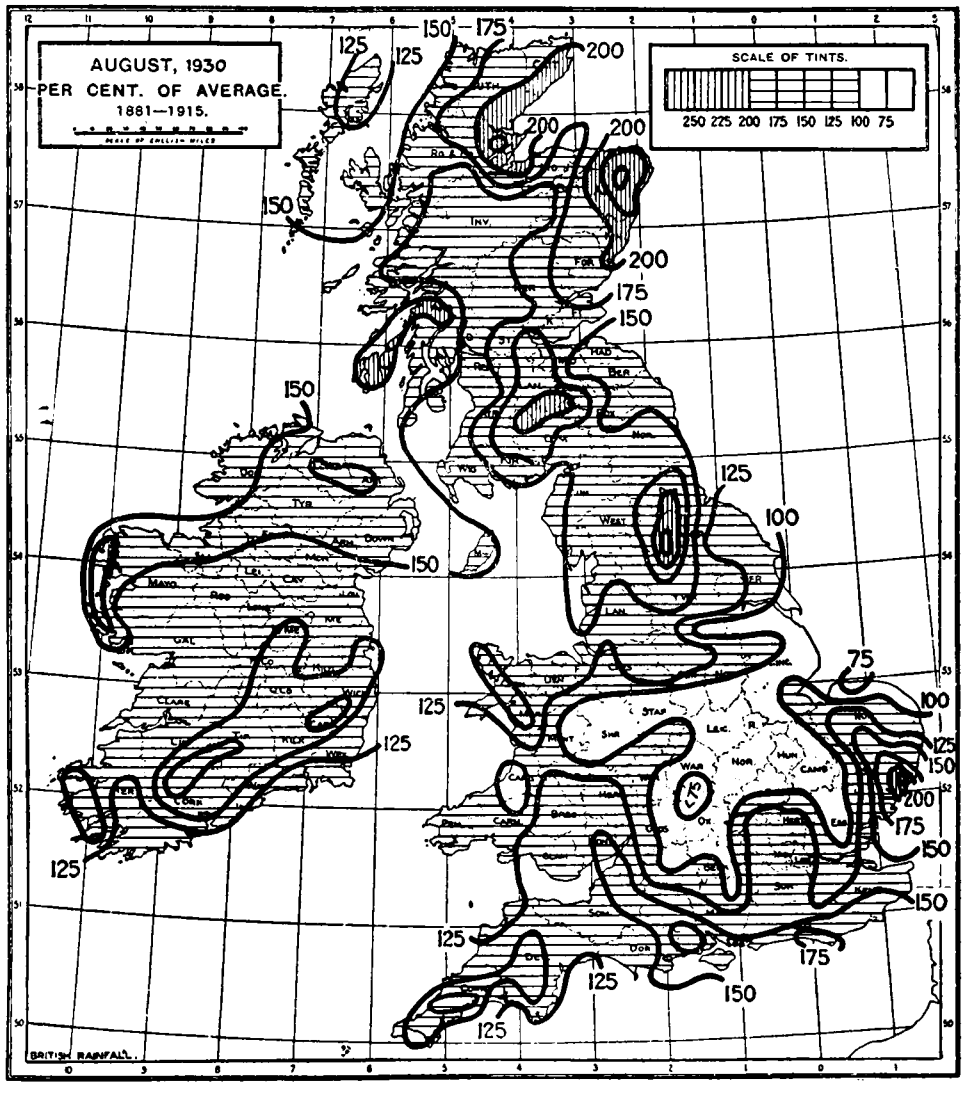
Rainfall, August, 1930.

on the 27th and the maximum temperature of 87°F. recorded at Ruthwell in Dumfriesshire on the 27th was the highest reading in Scotland since August, 1911, when 88°F. was recorded at Colmonell.

Thunderstorms, accompanied locally by heavy rain, commenced in the west, on the night of August 26th to 27th. On the 28th and 29th severe storms occurred in Scotland and the north of England and over a much wider area during the night of the 29th to 30th.

The bulk of the entries of intense falls of rain for August in Section 6 are for the 29th.

The rainfall over England was less than 75 per cent. near Hunstanton and Banbury and more than twice the average in the east of Suffolk and near Leyburn, Yorks, N.R. The large total at Rendlesham Hall, near Woodbridge, of 4·56 inches was due very largely to the heavy rain of the 3rd when 2·38 inches was recorded.



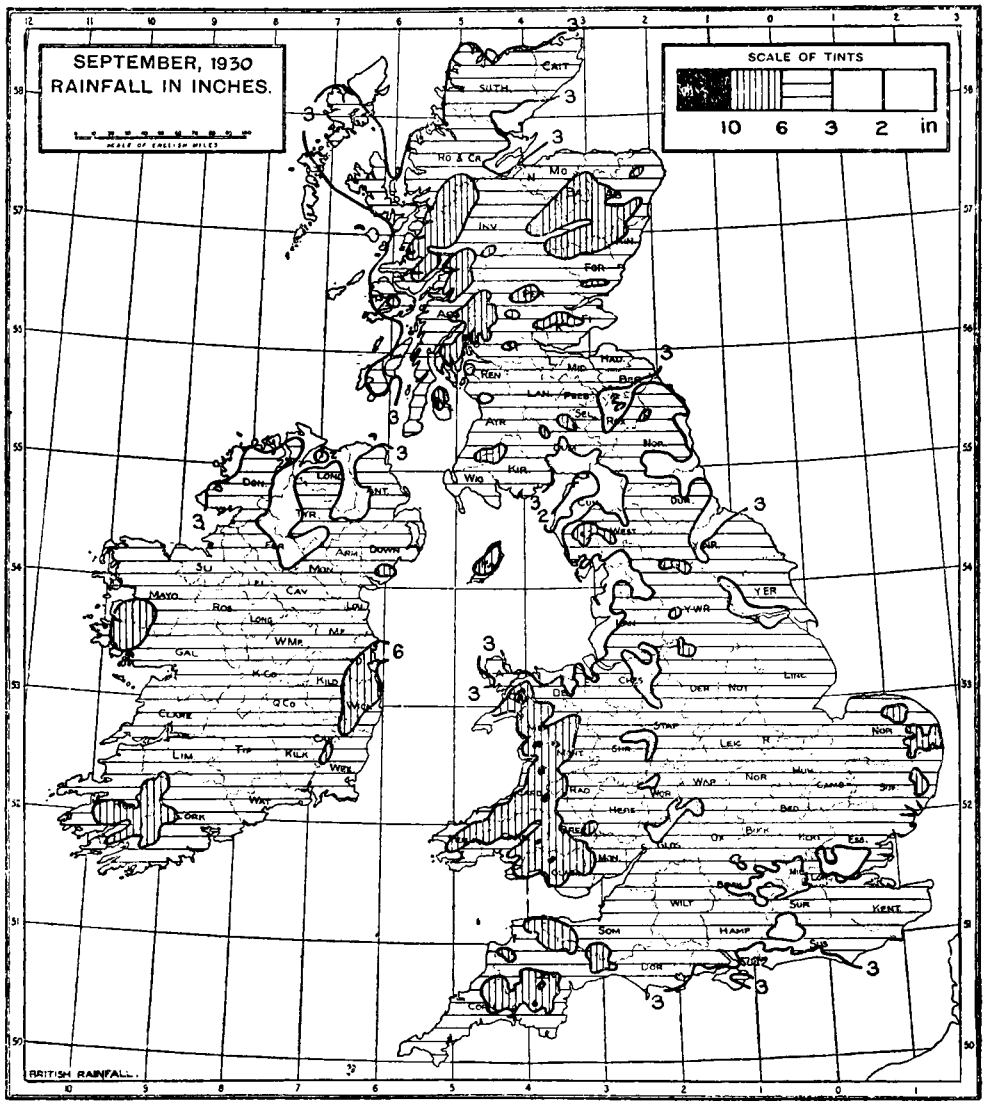
Rainfall, August, 1930, as per cent. of average.

At Leyburn (Bolton Hall) the total was 6·77 inches and 1·23 inches fel on the 20th and 3·03 on the 28th and 29th during two thunderstorms.

Over Scotland the rainfall varied from 121 per cent. at Stornoway to over twice the average in eastern Ross-shire, eastern Aberdeenshire and Kincardineshire and over a small area in the Southern Uplands.

There was more than 20 inches in the English Lake District, illustrating, again, that August is the wettest of the summer months in that area.

September was chiefly remarkable for its excessive and persistent rainfall in all districts, except the north-west of England and west of Scotland, and for pronounced deficiency of sunshine in Great Britain. Monthly mean temperatures exceeded the average in most places owing to the prevalence of mild nights. Cyclonic conditions prevailed during the greater part of the month and heavy rain occurred on a number of days. The mean pressure for the month

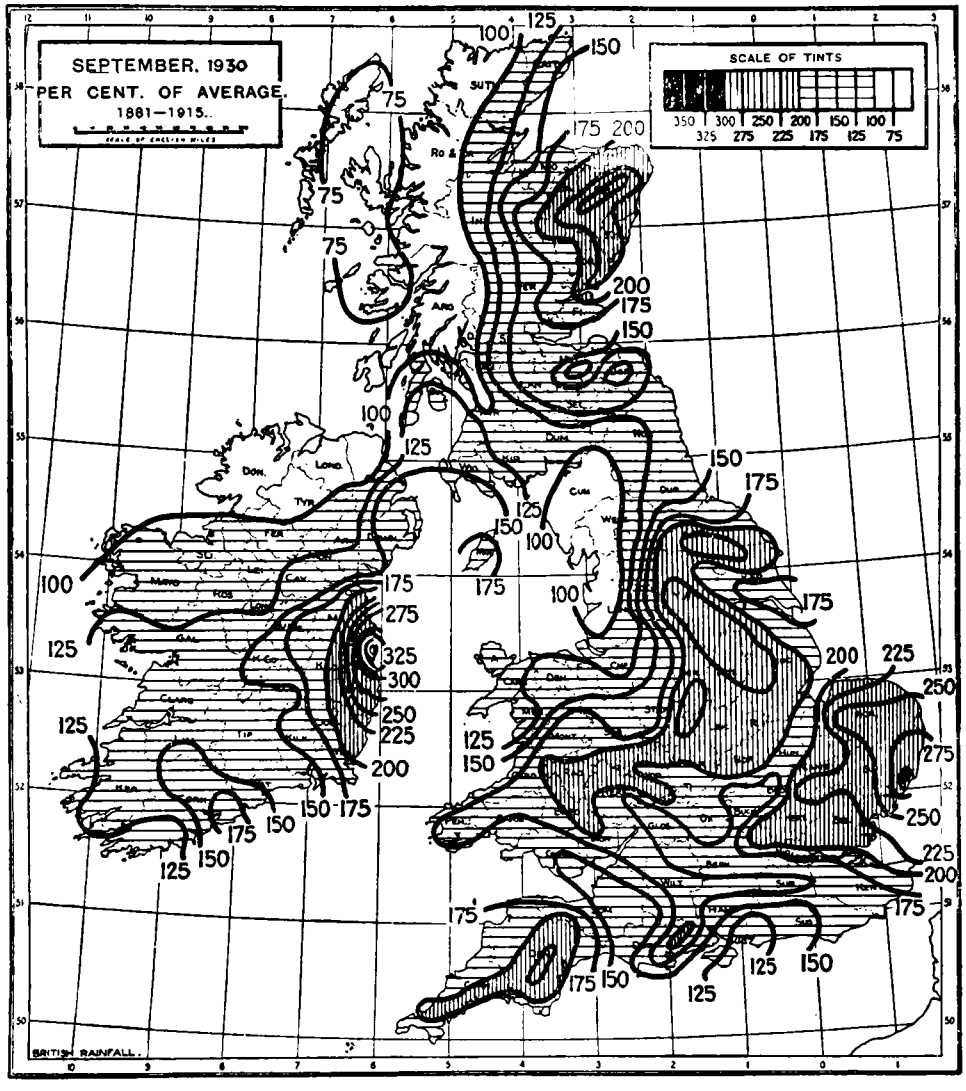


Rainfall, September, 1930.

was below the average everywhere. The percentage rainfall over England and Wales varied from 77 at Carlisle (Scaleby Hall) to 334 at Rendlesham Hall in Suffolk. The actual rainfall at these two stations was 2·09 inches and 6·41 inches respectively. The large total at the latter station included 3·30 inches for the 27th and 28th. At Campsea Ashe, near Woodbridge, East Suffolk, 3·09 inches was recorded during the 24 hours commencing 18h. on the 27th; extensive floods occurred in the neighbourhood and in many

places roads became impassable. The large total of 7·14 inches or 230 per cent. at Ashburton was mainly due to the fall of 4·20 inches for the four days, 17th to 20th.

Over Scotland the rainfall varied from less than 75 per cent. over the Western Islands to 269 per cent. at New Deer Schoolhouse, in eastern Aberdeenshire. Of the total of 6·77 inches at the latter station 1·53 inches fell on the 18th and 1·28 inches on the 25th.

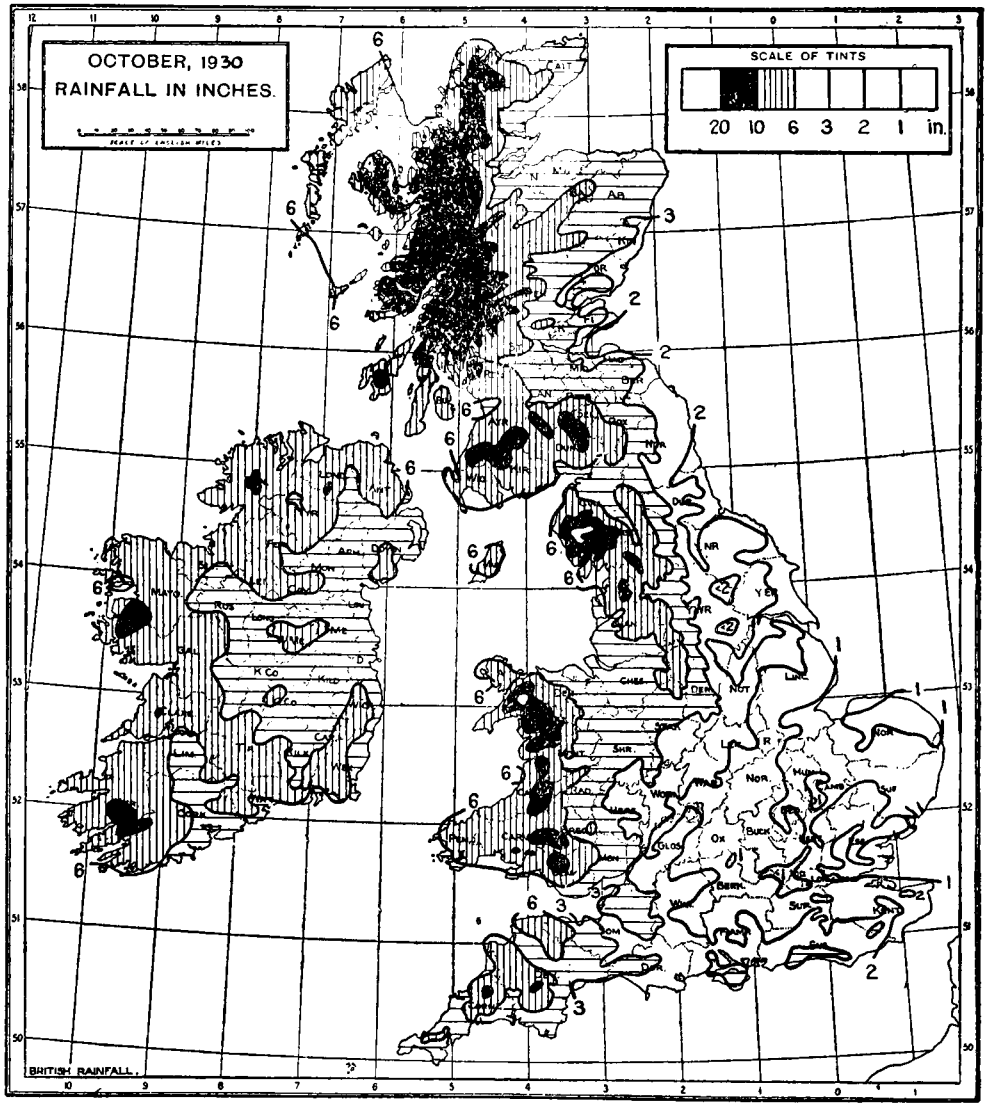


Rainfall, September, 1930, as per cent. of average.

There was less than the average in the north-west of Ireland and more than twice the average in the south-east. At Dublin (Fitzwilliam Square) the total was 6·87 inches or 357 per cent. of the average and the month was the wettest September on record.

The map of the rainfall in actual inches is remarkable for the small area between Carlisle and Whitehaven with less than 2 inches.

October.—Cyclonic conditions prevailed throughout the greater part of the month. Owing to the frequency of mild southerly and westerly winds, the monthly mean temperature was above the average in all districts, especially in the east and south of England. At Greenwich (London) the temperature rose to 70°F. on each of the three days 15th to 17th, while 65°F. was recorded as far north as Achnashellach (Ross and Cromarty) on the 15th. The mean pressure was below

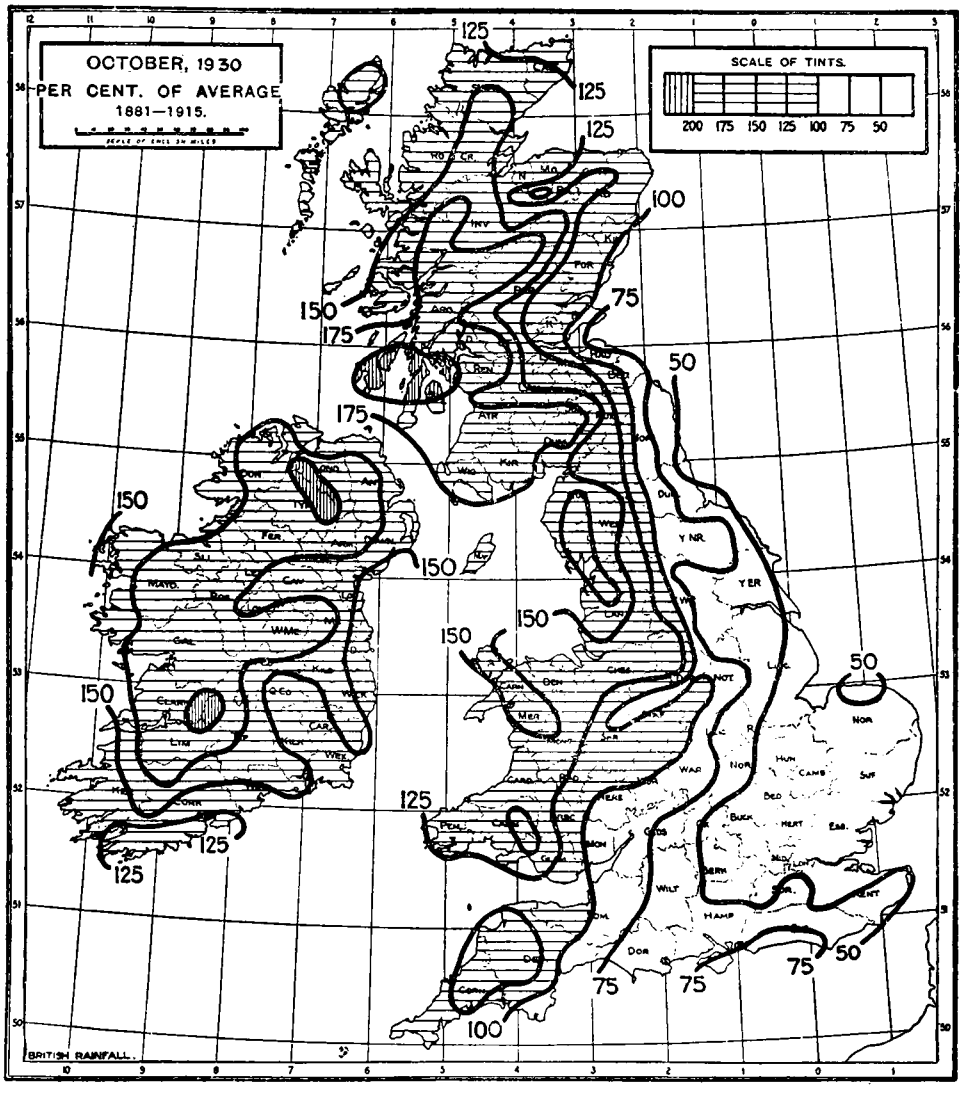


Rainfall, October, 1930.

the average everywhere, the departures from the average varying from −0·3 mb. at Scilly to −9·5 mb. at Lerwick. The pressure gradient was, therefore, greater than usual and the prevailing winds were between south and west. As is usual with this type of pressure distribution, the rainfall was above the average in the west and below in the east of the British Isles.

The rainfall over England varied from 29 per cent. along the east coast of Suffolk to 175 per cent. in the north-west of England. The rainfall was in excess of the average over the western half of England and Wales and below the average in the east and south-east.

The rainfall over Scotland varied from less than 75 per cent. near North Berwick to over twice the average in the islands of Bute, Islay, etc.



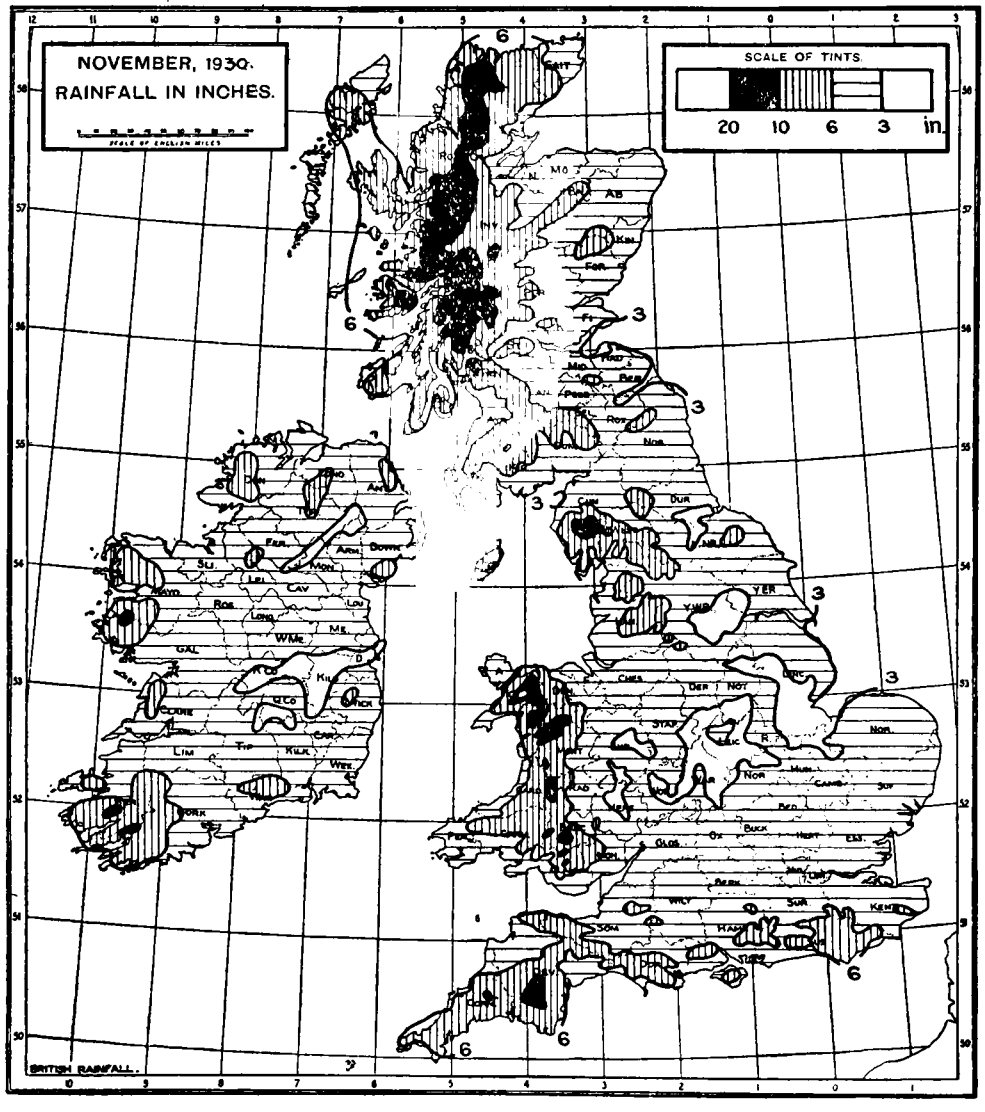
Rainfall, October, 1930, as per cent. of average.

The rainfall over Ireland exceeded the average everywhere and reached twice the average in Co. Tipperary and Co. Tyrone.

The total rainfall for the month varied from less than 1 inch in parts of south-east England to over 20 inches in the English Lake District and Snowdonia. A large part of the country recorded more than 10 inches, especially in Wales, the English Lake District and the western half of Scotland.

November was generally wet, especially in England and Wales. In spite, however, of its excessive wetness, monthly aggregates of bright sunshine were above the average in the eastern half of Great Britain. In Scotland, the month on the whole was the coldest November since 1925 ; in the south-east of England it was generally mild.

Cyclonic conditions predominated during the month and for



Rainfall, November, 1930.

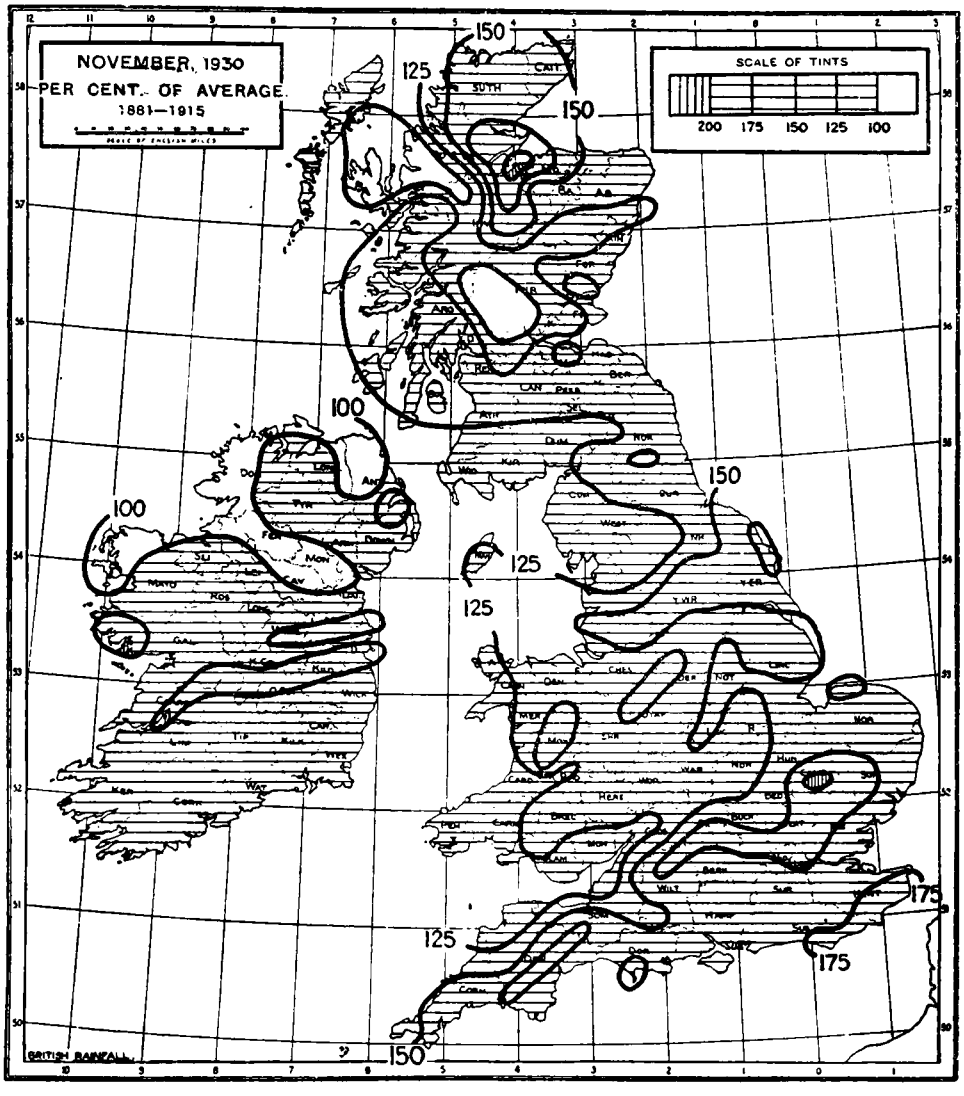
the fifth consecutive month the mean monthly pressure was appreciably below the average in all districts, the deviations from the average ranging from —5·7 mb. at Lerwick to —1·8 mb. at Scilly. Westerly winds predominated and were frequently strong, especially in exposed coastal regions in the south-west and north-west and in the outer islands off the west and north of Scotland.

The most frequent reports of snow were from northern districts

in Scotland between the 2nd and 5th and more generally from the 15th to 19th and again from the 21st to 23rd. On the 23rd the snow lay to a depth of 7 inches at Braemar.

Over England and Wales the percentage rainfall varied from 104 at Haverfordwest and 109 at Market Drayton to 194 at Calne, Wiltshire, and 189 at Hawkedon, Suffolk.

In Scotland there was less than the average over much of



Rainfall, November, 1930, as per cent. of average.*

Perthshire and Western Ross-shire and more than twice the average at Nairn. The rainfall at Nairn was 4·96 inches or 210 per cent. of the average.

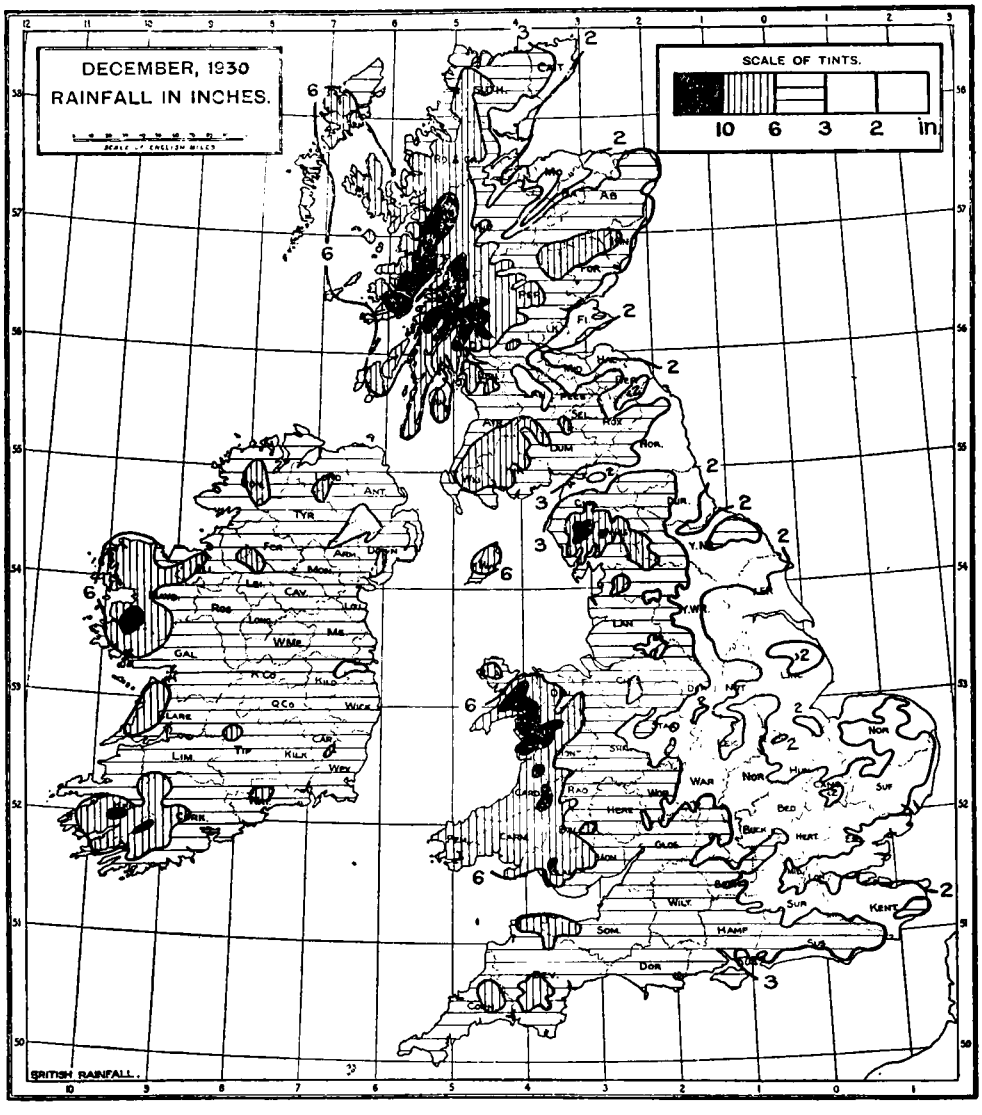
Over Ireland the rainfall was practically everywhere between 85 and 130 per cent. of the average.

The rainfall of the month exceeded 2·3 inches everywhere over the British Isles, and reached 23 inches in Snowdonia. The area with more than 10 inches was not so large as in October.

*The area within the closed line extending from Dublin to Limerick should have been left unshaded (i.e. rainfall less than 100 per cent.).

December was on the whole rather mild and quiet, apart from gales about the 11th and for a few days around the 27th. Ground frost occurred frequently in many parts of Great Britain, whilst mist and fog were unusually prevalent. In the north-western, midland and eastern districts of England there was a pronounced deficiency of sunshine.

The Christmas period was mainly mild with rain at times and



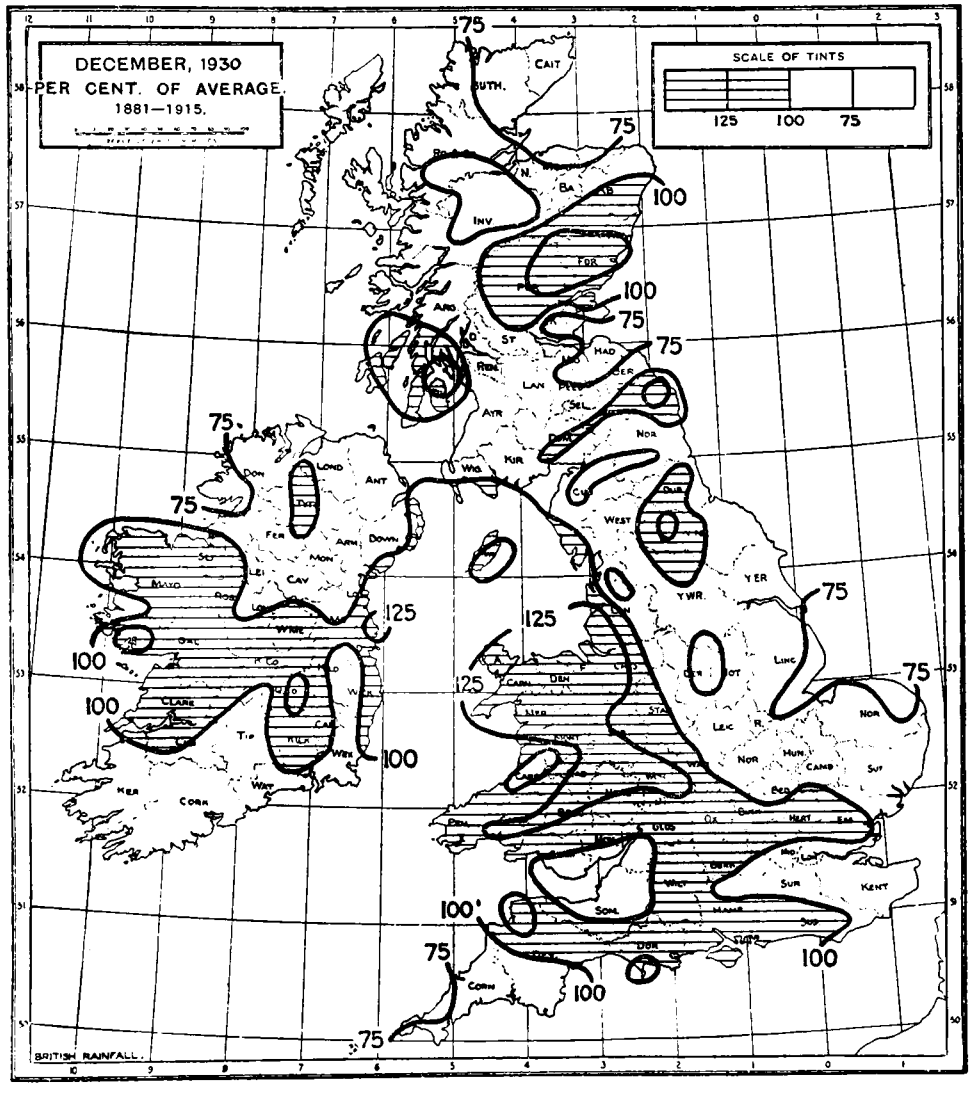
Rainfall, December, 1930.

bright sunshine, although snow fell heavily in parts of north-eastern England on the 26th. Gales occurred generally in the west and north on the 26th and 27th, and over southern districts in the evening of the 28th. Rain was heavy in the west and north on the 28th, when over 3 inches was recorded in Snowdonia and the English Lake District (see Section 7).

Over England and Wales the rainfall varied from rather less

that 75 per cent. in the neighbourhood of the Wash, near Stonyhurst College, Derby and Truro, and in the north of England to over 125 per cent., over much of Wales, in parts of the north of England and near Barnstaple.

Over Scotland there was less than 75 per cent. over much of the northern half and near the Firth of Forth, and more than 125 per cent. in Bute and Forfarshire.



Rainfall, December, 1930, as per cent. of average.

The rainfall over Ireland varied from less than 75 per cent. in Co. Donegal to over 125 per cent. in three small areas in Co. Galway, Leix and Dublin.

The total rainfall for the month varied from about 1·5 inches near Goole, at Chatteris (Cambridgeshire) and at Shoeburyness, to 20 inches on Snowdon. The area with more than 10 inches was smaller than in November, which is not usually the case.

Table XX.—*Monthly Rainfall at* 400 *Stations in the British Isles during* 1930.

ENGLAND

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
London	2	St. Pancras (Camden Square)	2·51	1·01	1·60	1·86	2·67	3·18	2·00	2·94	3·58	1·27	4·27	1·95	28·84
Surrey	6	Haslemere (U.D.C. Depôt)	6·60	1·54	1·41	3·27	2·90	·51	3·18	5·75	3·65	1·69	6·77	4·19	41·46
,,	6	Woking (The Green)	3·64	·80	1·30	1·74	2·40	1·26	1·93	2·70	3·03	1·14	4·37	1·91	26·22
Kent	1	Tenterden (Ashenden)	2·83	1·75	1·84	1·62	3·38	1·05	3·36	3·69	3·27	2·10	5·34	2·81	33·04
,,	1	Folkestone (Cherry Gdns.)	2·79	1·59	2·29	1·86	3·87	1·01	3·11	3·72	3·91	1·77	5·76	2·98	34·66
,,	2	St. Peters (Hildersham House)	2·34	1·71	2·04	1·55	3·11	1·32	2·84	2·68	4·62	1·61	4·34	2·32	30·48
,,	3	Teynham (New Gardens)	2·27	1·39	1·15	·93	3·63	1·38	1·81	3·35	3·28	1·26	4·11	1·80	26·36
,,	4	Rochester (Knight's Place)	2·46	·89	1·34	1·51	3·84	·72	3·53	3·03	3·81	1·28	4·41	2·20	29·02
,,	5	Westerham (Town)	3·80	1·40	1·96	1·88	3·09	·63	2·99	3·07	4·63	2·00	5·25	2·42	33·12
Sussex	1	Selsey (Large Acres)	4·01	1·91	1·42	2·56	1·56	·95	1·43	3·67	2·44	2·58	4·76	2·80	30·09
,,	3	Worthing (Beech House Park)	3·08	1·08	1·71	2·00	1·61	·76	1·80	3·45	2·44	2·88	4·90	2·60	28·31
,,	4	Balcombe (The Gables)	4·75	1·38	1·63	2·46	3·03	·82	2·99	4·77	3·58	2·22	6·39	3·68	37·70
,,	5	Eastbourne (Wilmington Sq.)	3·35	1·67	2·22	1·44	2·63	·79	2·13	3·47	3·26	2·88	7·46	3·65	34·95
,,	5	St. Leonards (Gensing Gdns.)	3·44	1·57	2·59	1·51	2·67	1·15	3·12	3·66	3·84	3·02	6·67	3·83	37·07
,,	7	Crowborough (Uckfield Lodge)	4·87	1·50	1·57	2·52	3·48	1·29	3·49	4·22	3·96	2·41	7·60	3·62	40·53
Hampshire	1	Totland Bay (Aston House)	4·21	·68	1·22	2·50	2·13	1·06	1·78	2·48	2·93	3·07	5·30	3·79	31·15
,,	4	Stockbridge (Houghton Lodge)	4·38	1·02	1·09	2·47	1·44	·98	2·20	3·50	3·24	1·73	5·07	3·50	30·62
,,	5	Bishops Waltham (Park Ho.)	4·63	1·22	1·48	2·50	2·19	·44	1·96	4·85	3·57	1·94	5·49	3·88	34·15
,,	8	Sherborne St. John	4·15	·81	1·23	2·07	1·75	·60	1·69	2·40	3·79	1·45	4·70	2·86	27·50
Berkshire	4	Bucklebury Place	3·26	·62	·96	2·26	1·63	·93	2·01	2·30	3·01	1·39	3·68	2·90	24·95
,,	5	Upton (Manor House)	2·80	·50	·77	1·83	1·46	·49	2·35	1·97	3·24	1·05	4·50	2·95	23·91
Hertfordshire	2	St. Albans (County Museum)	3·30	1·21	1·33	2·34	2·25	·43	2·16	2·74	3·40	1·36	4·38	2·84	27·74
,,	3	Royston (Therfield Rectory)	2·20	·46	1·49	1·95	3·26	1·98	2·92	2·59	4·42	1·10	4·29	2·47	29·13
Buckinghamshire	3	Slough (Upton)	3·02	·60	1·28	1·77	2·11	·56	1·59	2·77	2·85	·97	3·62	2·17	23·31
,,	3	Hampden House	2·91	·59	1·30	2·45	2·63	·43	2·81	2·31	3·19	1·27	5·18	3·91	28·98
,,	5	Wolverton (St. George's Vic.)	2·78	·65	1·38	1·64	2·02	1·19	2·29	1·92	3·52	1·25	3·37	2·33	24·34
Oxfordshire	2	Wootton Rectory	2·97	·66	1·52	2·57	2·19	1·48	3·97	2·35	3·33	1·81	3·22	3·09	29·16
Northamptonshire	1	Naseby Reservoir	3·11	·85	1·85	2·29	2·90	2·17	3·47	2·38	4·15	1·63	2·99	2·41	30·20
,,	4	Wellingborough (Swanspool)	2·63	·83	1·33	1·95	2·74	1·33	2·83	1·97	3·60	1·09	3·60	2·37	26·27
Huntingdonshire	1	St. Ives (Slepe House)	2·05	·63	1·47	2·11	3·19	·37	3·21	2·09	3·47	1·05	3·38	2·03	25·05
Bedfordshire	3	Shefford Council School	2·01	·38	1·42	1·40	2·25	·29	2·04	2·17	3·55	1·06	4·24	2·49	23·30
Cambridgeshire	2	Littleport (Highfield House)	1·76	·62	1·27	1·94	3·42	·30	4·61	2·36	3·78	·72	2·94	1·66	25·38

Table XX.—(*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*).

County and River		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Cambridgeshire .	3	Parson Drove (Clows Cross)	1·75	·72	1·63	2·20	3·28	·39	3·99	2·75	4·21	·71	2·63	1·83	26·09
Essex	2	Leigh (Brick House)	1·34	·60	1·04	1·38	2·49	·44	2·38	2·94	3·10	·78	3·43	1·71	21·63
,,	2	North Weald (Canes)	2·29	·49	1·49	1·85	2·96	1·70	2·14	2·62	3·18	1·03	3·79	2·35	25·89
,,	3	Bradwell-on-Sea (Bradwell Hall)	1·59	·89	1·41	1·81	1·79	·20	3·17	2·00	3·30	·89	4·08	1·83	22·96
,,	4	Gt. Bardfield (South Lodge)	1·75	·58	2·08	2·03	2·36	·66	3·13	2·52	4·03	1·23	3·07	2·27	25·71
Suffolk	1	Hawkedon Rectory	1·85	·72	1·36	2·93	3·03	·81	4·54	2·64	4·47	1·12	4·30	2·26	30·03
,,	2	Ipswich (Copdock)	1·94	·60	1·41	1·93	2·38	·67	4·76	2·68	4·86	·81	3·31	2·26	27·61
,,	3	Orford (The Gables)	1·72	1·04	1·22	1·63	2·19	·92	3·25	2·64	3·98	·89	3·25	1·66	24·39
,,	3	Halesworth Rectory	2·02	1·24	1·18	2·50	2·49	·66	4·23	2·86	5·65	·73	3·73	2·45	29·74
,,	4	Yarmouth (Burgh Hall)	1·64	1·00	1·21	1·42	2·77	·90	3·78	2·49	6·61	1·17	3·92	2·02	28·93
,,	5	Bury St. Edmunds (Westley Ho.)	1·86	·52	1·07	1·98	2·93	·48	5·21	2·27	4·15	1·22	4·52	2·20	28·41
Norfolk	1	Diss (The Cedars)	1·27	·55	1·18	2·05	2·96	1·04	4·86	2·34	4·98	·54	3·70	1·74	27·21
,,	1	Wymondham	1·75	·75	1·34	2·00	2·76	1·20	4·04	2·34	4·74	·93	3·75	2·08	27·68
,,	2	Aylsham (Rippon Hall)	1·86	1·12	1·74	1·57	3·41	1·19	5·10	3·18	6·04	1·23	4·50	2·50	33·44
,,	3	Sandringham House Gardens	1·82	1·02	1·82	2·85	2·90	·85	4·95	2·30	3·57	1·14	3·59	2·03	28·84
,,	3	Langham Episcopi Vic.	1·44	1·20	1·57	1·64	2·50	1·56	4·23	2·04	4·58	·88	3·49	1·60	26·73
,,	4	Thetford (Waterworks)	1·80	·61	·84	2·07	3·29	·63	4·46	2·67	3·75	·87	3·43	1·94	26·36
,,	4	Little Dunham (Dunham Cot.)	2·09	1·47	1·46	2·42	3·15	1·26	5·42	3·55	5·83	1·09	4·00	2·24	33·98
Wiltshire	1	Bradford (Manvers House)	4·27	·54	1·82	1·65	1·76	·34	2·42	3·81	3·60	2·68	4·33	3·54	30·76
,,	2	Mere (Charnage)	5·28	1·00	1·97	2·55	1·85	·84	2·56	4·37	4·16	3·01	5·44	4·18	37·21
,,	3	Larkhill (School of Artillery)	3·88	·90	1·37	2·31	1·75	·78	2·95	2·83	3·33	1·70	4·51	3·65	29·96
,,	5	Marlborough College	4·57	·73	1·75	2·42	1·37	1·16	2·49	2·94	3·63	2·09	5·54	3·97	32·66
Dorsetshire	3	Weymouth (Springfield)	3·32	·98	1·33	2·16	2·33	·46	1·62	3·04	3·43	2·48	5·33	4·39	30·87
,,	3	Beaminster (Hamilton Lodge)	7·46	·91	1·94	3·45	1·83	·71	2·99	4·56	5·18	3·17	7·12	5·70	45·02
,,	4	Winterbourne (Whitchurch Vic.)	5·24	·96	1·49	2·58	2·30	·69	2·15	3·93	4·25	2·91	6·83	4·60	37·93
,,	4	Wimborne (Codford House)	4·60	·77	1·13	2·54	2·75	·52	1·73	4·05	3·85	2·12	5·91	4·43	34·40
South Devonshire	3	South Brent (Beechfield)	11·42	2·40	4·17	4·19	3·55	1·57	4·10	6·73	7·75	8·15	10·22	7·55	71·80
,, ,,	5	Teignmouth (Den Gardens)	5·89	1·68	2·74	2·93	1·61	·19	2·00	3·78	4·48	3·26	6·53	4·23	39·32
,, ,,	6	Crediton (Okefield)	4·74	2·13	2·87	3·24	2·01	·55	2·07	3·29	4·17	4·04	6·02	4·42	39·55
,, ,,	7	Ottery St. Mary (West Hill)	5·85	1·43	2·64	3·92	1·90	·30	1·96	3·96	5·38	3·74	5·79	4·84	41·71
North Devonshire	1	Ilfracombe (Langleigh)	7·81	1·27	2·66	2·32	2·43	·93	4·10	4·45	4·93	7·53	4·16	6·19	48·78
,, ,,	3	Okehampton (Uplands)	9·76	2·20	3·32	4·37	2·56	1·02	2·93	5·30	6·41	7·94	8·47	5·75	60·03

Table XX.—(*con.*). *Monthly Rainfall*—**ENGLAND**—(*con.*).

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
North Devonshire	3	Dolton (Hilliers)	5·05	1·87	2·29	3·22	1·96	1·20	2·37	3·34	4·49	5·71	4·64	4·92	41·06
Cornwall	1	Redruth (Trewirgie)	8·41	3·35	3·65	3·49	2·04	1·81	2·91	6·23	6·69	5·84	8·20	3·92	56·54
,,	1	Newquay (Mount Wise)	6·80	2·13	2·98	1·98	1·61	1·04	1·94	3·87	3·88	4·85	5·51	3·12	39·71
,,	1	Bude (School House)	5·72	1·82	2·44	2·07	2·10	·90	2·22	3·28	3·94	4·77	3·94	3·31	36·51
,,	2	Penzance (Morrab Gardens)	8·23	3·36	3·69	2·36	2·07	1·39	3·01	4·78	5·74	5·71	6·53	4·43	51·30
,,	2	St. Austell (Trevarna)	8·11	1·90	4·22	3·17	3·12	·91	3·62	6·76	6·73	6·63	7·98	5·30	58·45
,,	2	Liskeard (Penmilder)	8·40	2·93	3·20	2·59	3·02	1·36	3·31	6·25	4·85	6·69	8·76	5·09	56·45
,,	2	Bolventor Vicarage	11·69	3·46	4·16	4·51	3·96	2·25	5·16	8·36	8·31	11·46	9·86	7·70	80·88
,,	3	Devonport (Cremyll)	4·34	2·26	2·62	2·52	2·70	·78	2·33	3·50	4·17	3·27	5·82	4·07	38·38
,,	4	Tresco Abbey	4·94	1·97	2·71	2·09	1·60	·83	2·89	4·36	4·06	4·82	6·26	3·52	40·05
Somersetshire	1	Long Ashton (Research Stn.)	5·33	·55	2·22	2·70	1·45	1·98	2·38	5·17	4·24	3·89	4·82	3·73	38·46
,,	2	Street (Portway)	3·66	·66	1·71	3·05	1·89	1·07	1·82	3·43	2·80	2·80	3·33	3·75	29·97
,,	2	Burnham (Chalbury)	3·82	·76	2·39	3·07	2·10	·49	1·83	4·11	3·51	3·09	3·89	3·49	32·55
,,	3	Taunton (The Park)	4·82	·86	2·63	3·23	1·50	·43	1·23	2·55	4·45	3·19	5·35	3·61	33·85
,,	5	Brushford Rectory	7·25	1·65	2·98	3·96	2·87	·91	3·59	4·62	6·58	6·76	6·30	5·93	53·40
Gloucestershire	3	Avening House	4·78	·65	2·56	2·40	1·24	·80	3·57	2·81	4·05	2·43	3·82	4·02	33·13
,,	3	Cheltenham (Montpellier Gdns.)	4·86	·35	1·60	2·56	1·94	4·46	3·82	2·47	3·03	1·94	3·55	3·38	33·96
,,	7	Lechlade (Claydon House)	3·62	·53	1·81	2·12	1·21	1·29	2·88	1·96	3·26	1·52	3·10	3·15	26·45
Herefordshire	1	Ross (Birchlea)	5·07	·89	2·77	3·11	1·55	·65	3·05	3·45	3·49	2·66	3·67	3·53	33·89
,,	1	Weobley School	5·27	·72	2·86	2·89	2·04	1·11	2·99	3·33	3·78	2·78	2·81	3·88	34·46
Shropshire	3	Bromfield (Warwick House)	5·92	·78	2·54	3·16	3·16	·72	3·74	3·26	3·53	2·88	3·03	3·72	36·44
,,	3	Culmington Manor	5·57	·76	2·75	2·87	3·20	·54	3·58	2·99	3·66	3·14	3·84	3·19	36·09
,,	3	Much Wenlock (Willey Park)	4·60	·48	3·40	2·63	2·55	·63	4·62	2·62	3·28	3·53	2·79	3·06	34·19
Staffordshire	2	Kingswinford (Ashwood P.S.)	5·02	·65	2·51	2·11	1·90	1·13	4·20	3·07	3·51	2·82	3·10	2·75	32·77
,,	2	Market Drayton (Old Springs)	5·02	·42	3·09	2·68	1·96	1·11	6·22	3·19	3·33	3·97	2·85	3·44	37·28
,,	3	Lichfield (St. John Street)	4·57	·60	2·80	2·42	2·18	2·00	5·01	2·66	3·78	2·22	3·28	2·64	34·16
,,	3	Stafford (Corporation Depôt)	4·22	·50	3·31	2·37	2·25	1·30	6·49	2·79	3·68	3·35	3·51	2·73	36·50
,,	5	Ashbourne (Mayfield House)	4·27	·69	2·94	3·04	2·39	2·62	6·24	3·15	4·00	4·95	3·94	3·47	41·70
Worcestershire	1	Malvern (Free Library)	5·14	·69	2·43	2·98	2·27	1·53	3·20	3·49	4·72	2·69	3·56	3·72	36·42
,,	2	Bewdley (C.E. School)	5·02	·56	2·68	2·77	2·49	1·29	3·61	2·90	3·23	3·20	3·05	4·08	34·88
,,	3	Blockley	4·79	·54	1·86	3·78	2·23	2·58	3·87	2·63	3·40	2·27	4·05	3·61	35·61
,,	3	Redditch (Hewell Gardens)	4·66	·40	2·71	3·26	2·28	1·27	3·98	3·17	4·30	2·79	3·16	3·18	35·16

Table XX (*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	n.	in.	in.	in.	in.	in.	in.	in.
Warwickshire .. 1	Warwick Castle Gardens.....	3·10	·45	1·61	2·05	2·48	1·15	3·33	2·27	3·38	2·41	3·24	2·92	28·39
,, .. 1	Coventry (Keresley Grange).....	3·76	·95	2·74	2·63	2·39	1·25	5·07	3·54	3·50	2·62	3·46	3·33	35·24
Leicestershire .. 4	Loughborough (Nan Pantan Res.)..	3·31	·49	2·59	3·11	2·64	1·43	4·77	3·18	4·23	2·30	3·29	2·42	33·76
,, .. 4	Belvoir Castle Gardens.....	2·76	·50	1·58	2·64	2·08	·75	3·20	2·07	3·78	1·56	2·94	2·25	26·11
Rutlandshire... 1	Uppingham (Ridlington)	2·91	·73	1·83	3·19	2·85	1·00	3·09	2·80	4·15	1·61	2·92	1·96	29·04
Lincolnshire.... 2	Market Deeping (Wilsthorpe).....	1·88	·83	1·73	2·59	2·70	·50	2·42	2·17	4·01	1·08	2·47	1·45	23·83
,, ... 3	Boston (Black Sluice, Skirbeck)....	1·93	·70	1·66	2·24	2·32	1·09	2·46	2·73	3·67	·96	3·06	1·56	24·38
,, ... 3	Sleaford (Kesteven Mental Hos.)...	2·44	·68	1·85	2·72	2·01	·65	2·31	2·50	4·77	1·89	3·08	1·96	26·86
,, ... 3	Hackthorn Hall.....	2·46	·51	2·34	2·36	1·64	1·49	4·61	2·94	4·42	2·34	2·86	1·95	29·92
,, ... 4	Skegness (Marine Gardens).....	1·56	1·04	1·37	2·70	1·83	1·65	4·41	2·26	3·45	·98	3·35	1·16	25·76
,, ... 4	Louth (Westgate)	2·73	·94	1·94	2·70	1·59	1·95	5·35	2·31	3·69	1·59	3·65	2·13	30·57
,, ... 5	Brigg (Wrawby Road).....	2·60	·28	1·72	2·35	1·83	2·60	5·50	3·66	3·58	2·21	3·10	1·71	31·14
Nottingham.... 2	Newark.....	3·11	·44	2·10	2·83	1·30	1·72	3·79	1·85	4·24	2·44	3·34	1·81	28·97
,, ... 5	Mansfield (West Bank).....	4·30	·72	2·64	3·51	1·39	1·80	5·89	2·79	4·84	2·48	3·58	2·87	36·81
Derbyshire..... 5	Littleover (The Knoll).....	3·77	·82	3·31	3·16	2·12	2·33	6·04	2·01	3·94	3·08	2·93	1·94	35·45
,, ... 6	Matlock Bath (Lower Tower).....	5·17	·82	2·81	3·08	1·79	2·00	6·62	3·39	4·96	4·42	3·93	3·63	42·62
,, ... 6	Buxton (Devonshire Hospital).....	6·33	·76	2·62	3·00	2·87	2·59	6·91	5·67	5·11	7·31	5·11	4·30	52·58
Cheshire..... 1	Altrincham (Burlington Cot.).....	4·50	·23	2·73	1·86	1·32	1·24	6·07	4·90	3·33	4·35	4·04	3·30	37·87
,, ... 2	Northwich (Winnington)	4·15	·20	2·53	2·62	1·81	1·71	4·97	3·39	2·84	4·24	3·61	3·27	35·34
,, ... 4	Eccleston	3·75	·35	3·60	2·51	1·46	·88	5·19	3·19	3·69	3·81	3·18	4·03	35·64
,, ... 4	Neston (Vine House).....	3·59	·31	3·51	2·90	1·18	1·53	4·13	3·96	2·99	5·00	3·13	3·88	36·11
South Lancashire 3	Bolton (Queen's Park).....	5·36	·35	3·36	2·40	2·20	2·79	6·18	7·84	3·77	6·57	6·40	4·86	52·08
Central ,, 1	Burnley (Swinden)	7·42	·85	3·27	4·09	2·94	2·25	5·92	7·83	4·16	7·17	7·12	5·36	58·38
,, ,, 3	Southport (Hesketh Park).....	4·88	·33	3·11	2·72	1·00	1·40	3·46	5·93	2·39	5·48	4·81	4·06	39·57
North ,, 1	Ulverston (Poaka Beck).....	7·86	·45	2·49	2·94	1·90	1·92	5·29	9·22	3·38	10·16	6·42	6·36	58·39
,, ,, 4	Lancaster (Greg. Obsy.).....	7·03	·27	3·24	1·76	1·25	2·26	3·83	6·38	2·59	7·75	4·93	4·57	45·86
,, ,, 5	Barton (Newsham House).....	5·69	·32	2·97	1·95	1·25	1·58	6·61	7·65	2·51	6·57	5·47	4·18	46·75
Yorkshire, W.R. 2	Settle (Gas Works).....	8·26	·45	3·81	3·56	1·72	1·54	4·53	6·86	2·42	7·45	5·50	5·23	51·33
,, ,, 7	Sheffield (Weston Park).....	4·74	·87	3·00	2·54	1·51	1·07	5·88	2·45	5·04	3·11	3·28	2·69	36·18
,, ,, 7	Doncaster (Avenue Road).....	3·44	·36	2·81	2·47	1·47	2·14	6·29	2·76	4·54	2·18	3·26	1·82	33·54
,, ,, 8	Meltham (Harewood Lodge).....	8·04	1·01	4·13	3·30	2·05	2·85	7·00	4·63	5·70	6·16	5·81	3·57	54·25
,, ,, 9	Leeds (Wortley Reservoir).....	4·16	·48	2·82	2·26	2·23	1·64	5·41	3·77	3·63	3·44	4·07	2·27	36·18
,, ,, 10	Ilkley (Spence's Garden).....	6·11	1·03	2·77	4·69	2·31	2·15	5·25	4·00	4·27	3·98	4·38	3·41	44·35

Table XX.—(*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*).

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Yorkshire, W.R.	10	York (Cherry Hill)	3·00	·85	1·45	2·27	1·10	1·71	4·73	3·34	2·93	1·63	3·10	2·00	28·11
,, ,,	10	Buckden	10·45	1·61	4·24	4·09	1·80	2·39	6·05	6·54	4·14	7·32	6·63	6·26	61·52
,, ,,	11	Knaresborough (The Abbey)	4·49	·79	2·47	2·91	1·80	1·77	5·19	2·98	3·64	2·03	4·47	2·65	35·19
,, E.R.	2	Birdsall Gardens	4·04	1·12	2·46	3·37	·95	1·43	6·20	4·19	3·68	2·33	4·22	2·64	36·63
,, ,,	3	Patrington (Rose Cottage)	2·07	·83	1·70	2·21	1·34	1·33	4·26	2·32	3·10	1·63	3·20	1·64	25·63
,, ,,	3	Holme-on-Spalding Moor	2·75	·45	1·51	2·15	1·32	1·47	4·79	4·47	3·16	2·28	2·86	1·73	28·94
,, ,,	3	Beverley (E. Riding Mental Hosp.)	3·14	·58	1·76	2·07	1·43	1·33	4·90	2·65	3·13	2·52	3·99	1·84	29·34
,, ,,	4	Bridlington (Corpn. Nurseries)	2·88	1·22	2·11	2·99	1·44	1·97	5·13	2·78	4·60	1·72	3·90	2·33	33·07
,, N.R.	1	Masham Moor (Roundhill Res.)	6·31	1·91	3·81	4·10	1·35	2·51	7·15	4·12	6·09	4·13	5·05	4·31	50·84
,, ,,	2	Felixkirk (Mount St. John)	3·99	1·32	2·77	4·25	1·34	2·05	6·89	2·90	4·38	2·41	3·62	2·78	38·70
,, ,,	2	Reeth (Arkengarthdale)	7·13	1·47	3·92	3·72	1·47	2·07	6·64	8·04	4·56	5·88	4·47	3·36	52·73
,, ,,	4	Thornton Dale (High Dalby Ho.)	3·70	2·10	2·54	4·37	·77	1·18	4·37	2·42	4·15	2·01	4·63	2·15	34·39
,, ,,	5	Whitby (Mulgrave Castle)	3·90	1·06	2·88	2·90	1·89	1·42	8·53	3·23	4·90	2·08	3·54	2·61	38·94
,, ,,	6	Middlesbrough (Albert Park)	2·71	1·25	2·82	1·96	1·12	1·16	4·89	3·38	2·54	2·08	3·10	1·78	28·79
Durham	2	Burnhope (Lodgegill Mine)	9·45	2·10	3·60	3·30	2·45	2·55	5·95	9·20	5·90	9·20	7·75	5·95	67·40
,,	2	Durham (Houghall)	3·67	2·07	2·58	2·32	1·54	1·10	7·59	4·41	3·04	1·86	3·37	2·74	36·29
,,	2	Weardale W.W. (Waskerley)	4·13	2·06	2·52	3·07	1·63	1·54	8·37	5·36	4·05	2·92	3·43	3·03	42·11
,,	2	Sunderland (W. Hendon Ho.)	3·61	1·57	2·15	1·95	1·29	1·50	5·67	4·65	3·33	1·70	3·57	2·58	33·57
Northumberland	3	Corbridge (Howden Dene)	3·54	1·68	2·03	1·91	1·22	·90	5·88	5·89	2·57	2·24	3·23	2·12	33·21
,,	4	Bellingham (High Green Manor)	4·06	2·03	2·21	1·81	1·23	1·28	6·28	4·23	3·90	3·61	4·11	2·98	37·73
,,	5	Morpeth (Cockle Park)	3·14	1·41	2·26	1·84	1·58	·80	3·93	5·80	3·30	2·19	3·55	2·69	32·49
,,	5	Fontburn Res. (Tynemouth W.W.)	3·35	2·50	2·63	2·59	1·90	1·09	4·49	4·78	3·52	2·24	4·09	2·70	35·88
,,	6	Wooperton	2·86	2·28	2·71	1·58	1·45	1·15	6·08	5·05	3·75	2·28	3·98	3·75	36·92
,,	6	Ilderton (Lilburn Tower Gdns.)	2·70	2·02	2·97	2·21	1·38	·95	6·83	4·19	3·46	2·20	4·29	3·74	36·94
Cumberland	1	Penrith (Laurel Bank)	5·67	·30	2·99	1·60	1·51	1·48	3·85	7·71	2·84	5·14	4·38	3·82	41·29
,,	1	Geltsdale	5·60	·39	2·18	1·93	1·45	2·27	7·63	6·69	2·57	4·75	3·92	2·72	42·10
,,	1	Carlisle (Scaleby Hall)	4·40	·35	2·65	1·65	1·15	2·79	6·32	7·01	2·09	4·61	3·83	2·04	38·89
,,	2	Borrowdale (Seathwaite)	21·75	1·75	6·84	4·12	4·20	5·20	6·10	15·15	8·75	23·01	14·25	11·75	122·87
,,	2	Keswick (Derwent Island)	10·28	·52	2·28	1·45	2·60	3·11	4·75	9·29	3·63	11·23	6·73	5·80	61·67
,,	3	St. Bees (Bickerley House)	6·25	·44	2·92	2·23	1·58	2·03	2·24	7·63	2·03	6·72	4·09	3·72	41·88
Westmorland	1	Kirkby Stephen (Eden Place)	8·04	·50	3·19	2·30	1·26	2·51	6·14	6·39	2·39	5·63	4·91	4·17	47·43
,,	1	Appleby (Castle Bank)	6·58	·29	2·75	1·92	1·79	1·52	3·94	5·47	2·44	5·52	4·15	3·81	40·18
,,	3	Kendal (Highgate)	8·42	·44	3·31	2·44	1·67	2·49	4·04	5·72	3·13	9·18	5·34	5·31	51·49

Table XX.—(*con.*) *Monthly Rainfall*—**MONMOUTH AND WALES, AND THE ISLANDS.**

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in	in.	in.	in.
Monmouth..... 3	Newport W.W. (Nantypridd).....	7·29	·66	3·23	3·39	1·79	1·09	4·49	4·41	5·37	4·77	4·93	5·21	46·63
,, ... 3	Abergavenny (The Chain).....	8·75	·89	4·07	4·48	1·17	·30	3·00	4·83	5·30	4·53	4·94	5·41	47·67
Glamorgan..... 3	Swansea (Victoria Park).....	7·93	·80	3·01	2·90	2·57	2·40	4·50	6·91	6·99	7·83	5·83	7·53	59·20
,, ... 5	Bridgend (Eiw Graig).....	7·09	·82	2·39	3·42	2·74	·91	3·49	7·26	6·39	7·75	5·57	5·97	53·80
,, ... 6	Treherbert (Tyn-y-waun).....	18·14	1·21	4·51	5·75	3·76	4·24	8·63	10·11	9·56	13·78	11·92	10·35	101·96
,, ... 7	Cardiff (Roath Park).....	6·67	·74	2·76	3·27	1·65	·70	3·13	5·40	5·04	5·25	5·56	4·52	44·69
Carmarthen.... 2	Carmarthen (The Friary).....	9·56	·53	3·23	2·68	2·35	2·46	4·56	4·86	5·92	7·82	5·56	7·33	56·86
,, ... 2	Llanwrda (Brynglas).....	9·83	·55	3·84	3·39	2·45	2·84	6·00	5·37	7·20	9·53	7·21	7·46	65·67
Pembroke..... 4	Saundersfoot (Hean Castle).....	6·65	·70	2·92	2·28	1·80	1·97	3·49	5·29	5·31	6·95	3·68	7·49	48·53
,, ... 4	Haverfordwest (Grammar School)..	8·61	·59	3·74	3·08	2·27	2·35	3·87	4·84	6·51	7·05	5·22	6·96	55·09
,, ... 4	Fishguard (Langton, Dwrbach)....	7·17	·44	3·04	2·18	2·09	1·58	3·18	4·11	4·40	7·43	4·48	6·95	47·05
Cardigan..... 2	Aberystwyth (Plant Breeding Stn.).	5·69	·36	2·51	1·70	2·51	2·36	4·21	4·67	4·61	6·51	5·03	6·77	46·93
,, ... 3	Cardigan (County School).....	7·39	·38	3·20	1·62	1·86	1·29	3·15	3·17	4·59	7·51	4·97	6·52	45·65
,, ... 3	Lampeter (Falcondale).....	8·47	·37	3·62	3·32	2·44	1·75	6·71	4·58	6·70	8·29	7·33	8·40	61·98
,, ... 5	Plynlimon.....	11·60	1·00	5·20	5·00	5·50	4·50	11·50	9·50	11·00	19·00	10·00	12·50	106·30
Brecon 7	Swansea W.W. (Cray Res.) No. 1...	14·77	·64	5·02	4·50	3·63	3·40	8·25	8·32	7·26	10·16	8·47	9·09	83·51
,, ... 8	Birmingham W.W. (Cors-yr-hwch).	(13·50)	(·65)	5·50	5·40	4·87	3·21	10·62	9·73	10·90	(14·12)	(11·90)	10·65	(101·05)
Radnor..... 1	Llandrindod Wells (Disserth Rec.).	7·91	·44	3·10	3·94	2·65	1·72	4·68	3·31	4·74	5·26	5·41	5·56	48·72
Montgomery ... 4	Newtown (Penarth Weir)	6·90	·72	3·07	4·02	2·25	1·55	3·53	3·04	4·01	4·70	4·49	4·76	43·04
,, ... 5	Llandysilio Rectory.....	4·38	·68	3·17	3·31	1·95	1·63	2·55	3·45	3·75	3·57	3·67	4·28	36·39
,, ... 5	Lake Vyrnwy.....	8·88	·87	4·83	4·65	2·15	2·89	5·31	5·09	6·94	9·04	9·77	9·12	69·54
Flint..... 2	Rhyl Sewage Works	3·90	·31	3·42	2·96	1·22	·92	2·76	3·34	2·14	4·02	3·89	3·78	32·66
Denbigh..... 1	Wrexham (Packsaddle Res.).....	4·80	1·22	3·51	3·44	2·42	1·42	3·15	4·22	4·57	5·10	4·13	5·27	43·25
,, ... 2	Llangynhafal (Plâs Drâw).....	5·46	·85	4·36	4·64	2·31	·77	3·82	3·70	2·69	4·95	3·92	4·97	42·44
,, ... 3	Pentre Voelas (Voelas Hall).....	11·39	·56	3·39	4·63	2·24	1·81	5·76	5·41	5·12	9·53	7·98	8·70	66·52
Merioneth..... 3	Festiniog (Hafod Fawr).....	13·21	·26	4·19	4·88	4·31	3·23	7·25	8·69	6·95	14·69	9·84	10·50	88·00
,, ... 4	Dolgelly (Bryntirion)	9·25	·79	3·66	3·12	4·24	2·99	7·36	8·92	4·95	9·51	8·97	9·58	73·34
Carnarvon 2	Llandudno	4·75	·33	3·20	2·68	1·28	1·21	1·78	3·20	2·81	4·63	4·30	4·50	34·67
,, ... 3	Bethesda (Penrhyn Quarries).....	13·51	·62	3·94	3·11	2·65	2·74	6·62	8·29	4·89	11·87	8·38	9·22	75·84
,, ... 4	Abersoch.....	5·86	·51	4·40	2·20	2·16	1·79	2·99	5·10	4·07	7·58	5·49	7·64	49·79
,, ... 5	Snowdon (Cwm Dyli).....	21·65	1·08	5·49	6·76	7·00	5·45	11·28	13·49	10·67	22·72	19·16	17·34	142·09

Table XX.—(*con.*) *Monthly Rainfall*—**MONMOUTH AND WALES**—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Anglesey.....	Holyhead (Salt Island).....	5·87	·46	3·73	2·11	1·26	1·56	2·60	4·81	3·14	6·11	4·68	5·13	41·46
,, ...	Llanerchymedd (Llwydiarth Esgob)	6·46	·41	3·75	2·44	1·45	1·70	2·59	5·50	3·39	7·12	5·28	6·25	46·34
	ISLE OF MAN.													
Isle of Man.....	Douglas (Borough Cemetery).....	6·37	·70	3·02	2·25	1·93	2·23	2·81	6·24	6·30	8·02	6·24	7·05	53·16
,, ...	Ramsey (North Promenade).....	8·98	·69	2·71	2·12	1·40	1·87	2·19	6·15	7·34	8·12	5·26	9·07	55·90
	CHANNEL ISLANDS.													
Jersey.....	St. Aubins (Belle Vue).....	3·72	2·11	2·76	4·26	2·25	1·00	3·55	2·72	3·44	4·69	7·95	4·69	43·14
Guernsey	St. Martin's (Les Blanches).....	5·04	1·52	2·21	3·71	1·82	1·09	1·88	3·31	3·11	3·03	8·53	4·06	39·31
Sark	Pointe Robert	4·93	1·26	1·77	3·20	2·00	1·43	1·74	4·22	2·81	3·52	5·01	4·04	35·93
Alderney	St. Anne (Grosnez House).....	5·02	2·23	1·80	3·09	2·18	1·24	1·20	2·24	3·02	2·67	8·35	4·57	37·61
	SCOTLAND.													
Wigtownshire .. 3	Whithorn (Glasserton)	5·42	·48	2·02	1·83	1·47	2·30	2·90	5·11	4·75	7·26	5·23	4·96	43·73
,, .. 3	Port William (Monreith).....	5·64	·36	2·28	1·79	1·18	2·16	2·59	5·00	4·44	7·22	5·19	5·18	43·03
,, .. 4	Kirkcowan (Craighlaw).....	7·20	·35	2·92	2·63	1·86	2·83	3·76	6·36	4·76	9·18	5·94	7·05	54·84
Kirkcudbrightsh'e 3	Dalry (Glendarroch)	9·27	·39	3·23	2·44	2·09	2·90	5·98	8·48	4·55	9·19	6·37	6·59	61·48
,, 4	Dalbeattie (Kirkennan)	7·15	·41	4·08	2·54	1·64	2·80	3·92	8·70	4·04	8·02	5·81	4·44	53·55
Dumfriesshire .. 3	Moniaive (Glencrosh)	9·73	·18	3·27	2·55	2·71	3·08	4·62	7·45	4·76	9·05	6·15	6·53	60·08
,, .. 4	Dalton (Kirkwood).....	6·57	·29	2·66	1·95	2·29	2·94	6·38	8·73	2·97	7·98	4·11	4·33	51·20
,, .. 5	Langholm (Ewes, Sandyhaugh)....	8·83	·54	2·71	2·40	2·55	2·30	5·88	9·88	3·76	9·70	6·00	6·05	60·60
,, .. 5	Eskdalemuir Observatory	10·76	·73	4·01	2·30	3·11	4·18	5·62	9·07	4·24	11·69	6·92	5·38	68·01
Roxburghshire.. 3	Jedburgh (Jedneuk)	2·22	·67	1·57	1·30	·82	1·62	4·65	3·90	1·86	3·32	2·86	1·70	26·49
Selkirkshire 4	Caddonfoot (Fairnilee)	3·78	1·12	2·86	1·66	1·49	2·49	4·22	7·75	3·45	5·33	3·96	3·95	42·06
Peeblesshire.... 1	Edin. W.W. (Victoria Lodge).....	8·63	·67	2·62	2·14	2·13	3·07	3·90	7·71	3·78	8·20	6·04	4·69	53·58
,, ... 2	Stobo Castle.....	5·58	·64	1·77	1·46	1·31	1·91	2·70	7·30	3·80	5·24	4·75	3·51	39·97
Berwickshire ... 2	Earnscleugh Burn (Blythe Rig)....	3·13	1·87	2·65	2·79	1·23	2·13	4·09	6·13	5·96	4·55	5·22	2·98	42·73
,, ... 4	Marchmont House.....	2·12	1·57	2·35	2·18	·95	1·64	3·59	4·70	4·49	3·85	4·38	2·69	34·51
Haddingtonshire 5	North Berwick Reservoir.....	1·69	1·35	1·78	1·25	·86	1·60	4·01	4·70	3·33	1·88	3·07	1·27	26·79
Midlothianshire. 5	Pentland Hills (Harperrig).....	5·64	·71	3·48	1·41	1·98	2·49	4·45	7·56	4·34	4·44	5·76	2·95	45·21

Table XX.—(*con.*) *Monthly Rainfall*—**SCOTLAND**—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midlothianshire. 5	Edinburgh (Royal Observatory)...	3·03	·46	2·15	1·17	1·22	1·81	3·90	5·18	4·16	3·17	3·81	1·63	31·69
Lanarkshire.... 4	Gartcosh (Gartloch Hospital).....	5·10	·18	2·07	1·15	1·67	2·49	2·40	5·95	3·47	5·45	5·07	3·22	38·22
,, ... 5	Douglas (Kilncroft).....	5·81	·34	2·31	1·36	1·61	2·67	3·80	5·40	3·27	5·74	5·59	5·18	43·08
,, ... 5	Strathaven (East Overton Ho.)....	6·23	·38	2·39	1·19	1·43	2·64	4·41	4·82	3·97	6·81	6·34	3·20	43·81
Ayrshire..... 3	Dalry (Munnock Reservoir).....	5·78	·24	3·43	2·67	2·30	3·09	4·10	6·78	4·51	8·29	5·50	6·11	52·80
,, ... 6	Maybole (Culzean Castle Gardens)..	5·34	·25	2·52	1·33	1·83	2·61	2·80	6·16	3·49	6·90	5·37	4·08	42·68
,, ... 8	Colmonell (Knockdolian).....	7·00	·40	2·81	2·04	2·00	2·52	2·59	5·76	4·37	8·72	5·18	4·92	48·31
,, ...13	Glen Afton (Ayr Sanatorium).....	10·15	·46	2·51	2·73	1·86	2·26	5·36	8·12	4·88	10·00	7·57	6·26	62·16
Renfrewshire... 2	Houston Manse	7·69	·47	3·96	1·54	2·07	2·94	3·49	5·07	3·71	7·36	6·12	4·77	49·19
Dumbartonshire 2	Cardross (Kilmahew).....	5·52	·24	3·37	2·25	1·93	2·88	1·99	6·42	3·99	8·25	6·14	5·20	48·18
Stirlingshire.... 1	Falkirk (Westbank Garden).....	4·99	·79	2·80	·81	1·62	2·74	3·87	5·15	4·03	4·89	4·32	2·76	38·77
Buteshire..... 1	Rothesay (Ardencraig).....	5·84	·28	3·26	3·06	2·50	3·34	4·52	8·09	4·66	9·56	7·21	7·67	59·99
,, ... 3	Arran (Dougarie Lodge).....	4·85	·40	2·76	2·58	2·11	2·76	2·60	5·81	4·03	7·54	5·91	5·38	46·73
Argyllshire..... 2	Loch Sunart (Glenborrodale).....	9·75	·63	4·92	2·77	3·28	4·24	2·18	8·24	4·09	10·53	9·39	8·19	68·21
,, ... 2	Acharacle (Shielbridge).....	10·60	·78	3·53	2·44	2·88	4·03	2·22	9·25	4·71	11·08	8·57	7·62	67·71
,, ... 3	Morvern (Kingairloch).....	17·84	·76	8·48	3·62	5·78	6·87	4·01	11·82	6·22	18·46	11·19	11·12	106·17
,, ... 5	Glen Etive	17·88	·63	6·45	4·34	5·05	6·25	4·52	13·33	6·37	14·61	13·93	12·49	105·85
,, ... 6	Dalmally (Manse of Glenorchy)	12·66	·57	5·70	2·64	4·82	4·32	4·13	8·74	5·04	12·36	13·32	8·90	83·20
,, ... 7	Oban	8·79	·48	3·84	1·96	2·73	3·26	2·86	8·06	3·40	8·12	6·30	6·49	56·29
,, ...10	Campbeltown (South Park).....	5·03	·28	4·37	2·38	2·09	2·95	3·03	6·21	4·75	9·01	7·20	8·01	55·31
,, ...10	Skipness (Claonaig).....	5·88	·46	2·64	2·91	2·47	2·79	3·55	7·96	4·73	9·09	7·16	5·92	55·56
,, ...11	Ardrishaig (Canal Office).....	8·74	·66	4·51	3·12	3·26	3·32	4·20	8·58	5·03	11·23	7·98	8·26	68·89
,, ...11	Ardkinglas	14·02	·54	4·73	2·77	3·09	4·35	3·05	7·83	5·45	11·84	11·08	10·74	79·49
,, ...12	Loch Eck (Benmore).....	13·53	·81	6·38	4·09	4·68	5·06	5·76	11·40	6·83	15·16	14·11	10·90	98·71
,, ...14	Islay (Ardbeg).....	4·58	·58	3·10	2·19	1·80	3·29	2·85	7·97	3·83	8·86	6·08	5·56	50·69
,, ...14	Jura (Ardfin)	6·95	·61	4·01	2·71	2·10	3·74	2·82	8·53	4·24	8·90	7·74	7·02	59·37
,, ...14	Mull (Bunessan).....	6·57	·38	2·83	2·87	1·73	4·01	2·33	8·25	2·94	8·08	7·13	5·86	52·98
,, ...14	Mull (Benmore).....	24·00	1·20	7·90	4·50	4·50	8·60	6·40	20·00	12·40	13·10	15·90	(14·00)	132·50
,, ...14	Mull (Glencannel)	18·68	1·39	7·58	2·78	4·50	7·86	3·56	12·27	4·22	13·26	13·82	12·51	102·43
,, ...14	Tiree (Cornaigmore Sch.).....	6·37	·46	2·95	2·48	1·41	4·08	2·33	5·59	2·72	6·80	5·65	6·34	47·18
Fifeshire..... 2	Kirkcaldy (Munro Street).....	2·85	·78	2·04	1·68	1·40	1·76	2·49	7·76	3·94	2·86	3·84	2·00	33·40
,, ... 3	Cupar (Fife and Kinross Asylum)..	2·51	1·49	2·21	1·76	1·61	2·01	1·99	7·30	4·30	3·25	3·27	2·80	34·50

Table XX.—(*con.*) *Monthly Rainfall*—**SCOTLAND**—(*con.*).

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Perthshire	3	Loch Drunkie	9·55	·60	4·40	1·50	4·00	4·00	5·20	7·05	5·05	8·60	8·05	8·60	66·60
,, ...	3	Glengyle	17·15	1·45	6·30	3·05	3·85	4·30	3·75	8·55	7·10	14·95	10·25	10·70	91·40
,, ...	4	Glendevon (Tormaukin)	6·78	·89	2·93	1·69	2·89	3·47	4·06	6·13	6·54	7·28	6·12	5·61	54·39
,, ...	7	Lochearnhead (Edinchip).....	11·68	·99	4·25	2·45	3·04	3·93	4·05	8·39	5·70	11·68	8·74	7·64	72·54
,, ...	7	Crieff (Strathearn Hydro).....	5·19	·81	2·24	1·40	1·73	2·02	2·84	5·94	4·60	4·63	3·80	5·29	40·49
,, ...11		Aberfeldy (Dall Avon)	6·21	·92	2·24	1·82	1·27	1·26	2·33	5·22	4·64	5·40	5·19	6·34	42·84
,, ...14		Loch Rannoch (Dall)	8·43	·87	2·36	1·47	2·60	2·07	2·16	6·36	4·20	6·75	6·48	4·88	48·63
,, ...14		Glen Bruar (Bruar Lodge)	6·61	·58	2·12	2·20	2·53	2·59	2·75	6·51	5·61	8·21	6·02	5·04	50·77
,, ...15		Kirkmichael (Ballintuim Ho.).....	5·19	1·57	1·86	2·25	1·84	2·36	2·48	8·17	4·71	5·40	4·94	6·97	47·74
Angus (Forfar) .	1	Kettins School	3·68	1·63	1·87	1·75	2·00	1·84	2·45	6·13	3·76	3·00	4·42	4·75	37·28
,, ..	3	Arbroath (W. Cemetery)	1·75	·91	1·48	2·33	1·15	1·65	2·55	6·49	5·65	2·66	3·63	2·16	32·41
,, ..	3	Glen Prosen (Pearsie House)	3·33	1·87	1·51	2·89	2·12	2·38	2·75	7·21	5·47	3·69	4·04	4·98	42·24
Kincardineshire	1	Marykirk (Balmakewan)	2·69	1·52	1·33	2·56	1·52	2·25	1·80	6·32	5·37	2·90	3·91	4·63	36·80
,,	3	Strachan (Bridge of Dye).....	4·07	2·59	2·05	4·48	2·06	2·64	3·05	7·75	7·79	4·28	5·32	7·78	53·86
Aberdeenshire ..	1	Glen Muick.....	4·65	1·60	2·28	3·80	2·23	2·48	3·11	7·58	7·05	6·51	4·09	6·63	52·01
,, ..	1	Ballater (Irrigation Farm)	2·31	2·28	1·78	2·11	1·02	1·40	3·04	6·60	5·75	3·47	4·25	4·85	38·86
,, ..	1	Logie Coldstone School.....	2·31	2·05	1·07	2·12	1·12	1·82	2·16	5·73	6·07	3·13	3·82	2·85	34·25
,, ..	2	Aberdeen (King's College)	1·85	1·12	1·33	3·09	·99	2·21	1·41	5·96	4·53	3·05	3·53	3·96	33·03
,, ..	2	Craibstone (Woodlands Field).....	1·91	1·49	·98	3·16	1·15	2·12	1·58	6·55	6·41	3·38	4·02	4·75	37·50
,, ..	3	Haddo House.....	1·96	1·78	1·29	2·43	·96	1·98	1·57	7·38	5·69	3·73	4·27	3·29	36·33
,, ..	4	Peterhead (Forehill Works).....	1·87	1·11	1·13	3·35	1·58	1·95	1·48	8·21	4·97	4·64	4·75	3·35	38·39
,, ..	5	Huntly (Cruchie)	1·41	1·42	1·74	2·12	1·02	2·69	2·87	6·29	4·69	4·09	4·02	2·32	34·68
Banffshire	2	Turriff (Forglen Gardens).....	1·67	1·47	1·62	2·28	1·01	3·21	3·09	5·85	4·84	3·97	4·65	2·43	36·09
Morayshire.....	2	Gordon Castle	1·66	·78	1·26	1·66	1·17	1·13	4·13	5·11	4·62	4·39	4·42	1·63	31·96
,, ...	3	Grantown-on-Spey	2·63	·77	1·54	1·83	1·51	1·58	3·33	4·68	4·24	2·77	3·99	2·08	30·95
,, ...	3	Aberlour (Wester Elchies)	1·89	1·01	1·85	1·88	1·14	·99	4·12	5·15	5·50	4·14	4·98	1·29	33·94
Nairnshire	2	Nairn (Achareidh).....	1·95	·69	1·21	1·27	1·29	1·20	2·47	5·33	3·07	3·75	4·75	1·99	28·97
Inverness-shire .	3	Cluny Castle	6·17	·55	1·88	1·51	2·93	2·42	2·59	4·39	4·52	6·04	2·99	1·73	37·72
,, ..	3	Alvie Manse	4·07	·65	1·23	·99	·87	1·05	3·93	3·83	4·40	3·98	5·02	1·95	31·96
,, ..	6	Fort Augustus (St. Benedict's)	9·73	·51	1·89	1·26	2·22	2·63	1·99	4·81	3·48	6·79	4·72	3·83	43·86
,, ..	6	Loch Ness (Foyers)	7·95	·53	1·61	1·42	2·55	2·31	3·01	4·61	3·61	5·62	6·80	3·04	43·06
,, ..	7	Loch Quoich (Glenquoich).....	19·92	·96	7·02	4·48	7·31	6·17	3·39	11·87	6·88	18·85	17·86	12·50	117·21

Table XX.—(*con*). *Monthly Rainfall*—**SCOTLAND**—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	n	in.	in.	in.
Inverness-shire . 12	Loch Nevis (Inverie Gdns.)	13·48	1·46	4·52	3·12	4·08	5·89	2·87	9·94	4·73	11·71	11·42	9·65	82·87
,, ..13	Arisaig House	9·02	·79	4·37	2·31	2·81	4·61	2·97	9·01	4·60	9·70	9·49	6·81	66·49
,, ..17	Glenleven (Corrour Station)	12·60	·68	3·90	2·21	4·31	4·87	2·45	8·63	5·67	13·40	9·50	7·10	75·32
,, ..17	Fort William	16·53	·69	4·80	1·99	4·11	5·99	2·74	7·95	5·17	12·60	9·39	7·68	79·64
,, ..18	Hyskier	7·36	·00	3·33	4·00	2·86	2·93	2·52	7·08	4·03	8·05	8·10	9·02	59·28
,, ..18	Skye (Kyleakin, Dunringell)	13·12	1·14	5·40	2·62	3·53	4·08	2·11	9·29	3·46	10·03	7·26	8·44	70·48
,, ..18	Skye (Portree)	11·13	·63	4·73	3·59	3·28	4·86	1·87	8·59	3·92	12·40	9·05	7·54	71·59
,, ..18	Skye (Dunvegan)	9·32	1·01	5·12	3·10	2·67	5·36	1·33	7·32	3·98	10·89	6·86	8·49	65·45
,, ..19	N. Harris (Amhuinsuidth Castle)	7·84	1·16	4·54	2·64	1·98	3·60	2·28	5·20	3·26	10·05	6·44	6·05	55·04
Ross & Cromarty 4	Strathpeffer	4·24	·67	1·37	·77	1·35	1·81	1·72	6·27	2·35	5·54	4·39	2·92	33·40
,, 4	Cromarty House	1·48	·50	·76	·99	1·61	1·61	1·57	4·41	2·11	2·50	3·80	1·98	23·32
,, 4	Alness (Ardross Castle)	4·01	1·21	1·95	1·81	2·56	1·93	2·59	7·05	3·33	6·12	7·20	3·27	43·03
,, 7	Braemore (Loch a' Bhraoin)	8·52	1·20	2·46	2·19	5·32	3·15	4·23	8·55	5·92	11·59	9·71	7·06	69·90
,, 7	Ullapool	6·11	·87	2·70	1·65	2·40	3·04	1·89	7·08	3·23	7·11	8·44	5·48	50·00
,, 8	Loch Torridon (Bendamph)	14·66	1·14	6·56	2·55	4·11	4·26	1·95	10·14	5·37	10·84	7·89	7·68	77·15
,, 9	Loch Carron (Dunhulladale)	10·19	·87	4·53	2·99	4·22	4·69	2·59	11·51	3·93	12·06	11·28	7·54	76·40
,, 10	Stornoway	6·62	·74	3·07	1·99	2·48	2·60	1·43	4·80	2·79	7·91	5·87	5·44	45·74
Sutherlandshire 1	Lairg	2·99	1·58	1·87	1·34	1·99	2·07	2·09	6·68	2·87	5·98	6·60	2·34	38·40
,, 2	Golspie (Technical School)	1·63	1·01	1·16	1·49	2·12	1·68	1·90	5·50	2·54	5·33	4·16	2·02	30·54
,, 4	Skerray (Borgie)	3·88	1·48	3·71	1·58	2·76	2·86	3·66	5·63	2·85	5·50	8·92	3·04	45·87
,, 4	Tongue	3·73	1·43	3·48	·96	2·12	2·33	3·01	5·86	2·63	5·29	7·41	2·78	41·03
,, 5	Loch More (Achfary)	10·02	1·91	5·67	2·97	5·39	5·25	2·71	9·64	4·76	11·20	13·61	8·00	81·13
Caithness-shire . 2	Wick	2·01	1·22	1·60	2·12	1·51	3·19	1·36	5·57	3·87	3·64	3·85	2·04	31·98
,, 3	Altnabreac	2·05	1·34	1·11	1·34	2·09	2·59	1·87	7·41	2·96	4·61	4·83	3·36	35·56
,, 3	Thurso (Buckies)	2·59	1·37	3·18	1·32	2·90	2·70	4·26	7·77	3·84	4·43	5·79	3·14	43·29
Orkney	Pomona (Deerness)	3·08	·85	1·74	2·19	2·68	1·93	1·63	4·17	4·43	4·88	4·26	3·72	35·56
Shetland	Lerwick Observatory	5·50	1·45	2·68	1·97	1·48	2·66	2·93	4·17	2·96	4·99	4·45	4·82	40·06

Table XX.—(*con.*) *Monthly Rainfall*—**IRELAND.**

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Cork	4	Garinish Island	12·12	·85	8·35	2·85	3·54	4·22	3·38	5·91	5·72	8·78	8·50	7·99	72·21
,,	6	Castletownshend (Seafield)	8·49	1·59	5·51	1·94	2·61	3·22	2·73	4·69	4·43	6·86	5·75	4·64	52·46
,,	6	Dunmanway (The Rectory)	11·48	1·11	7·96	2·36	2·74	3·40	3·76	5·56	5·08	6·84	7·37	6·09	63·75
,,	7	Cork (University College)	7·07	1·03	6·88	2·09	1·67	2·15	2·79	5·36	4·52	5·12	5·26	3·97	47·91
,,	8	Roches Point	7·05	1·65	7·88	2·67	2·76	1·71	2·69	5·48	4·41	6·25	5·00	5·20	52·75
,,	9	Mallow (Longueville)	7·11	·42	6·29	2·37	1·46	2·71	2·36	5·67	3·93	5·42	3·97	3·80	45·51
,,	9	Kanturk (Castlecor)	5·70	·84	5·28	2·70	1·21	3·84	3·05	5·92	4·54	5·23	4·24	4·10	46·65
Co. Kerry	3	Cahirciveen (Valentia Obs.)	10·97	1·17	6·54	3·07	3·07	3·65	4·11	7·96	4·79	7·48	6·35	6·27	65·43
,,	3	Killarney (Flesk Mills)	13·45	·29	7·12	3·00	1·66	2·87	2·60	5·81	4·89	8·06	(5·38)	(5·86)	(60·99)
,,	3	Killorglin (Callinafercy)	8·51	·99	5·84	2·77	2·15	2·37	3·55	6·15	4·49	8·43	5·34	6·05	56·64
,,	3	Bally McElligott Rectory	7·45	·50	5·23	2·31	1·79	2·81	(2·91)	6·12	3·45	6·68	3·81	5·68	48·74
,,	4	Darrynane Abbey	8·52	1·59	6·69	3·14	2·78	2·81	2·36	7·85	4·54	7·09	7·12	7·64	62·13
,,	4	Kenmare (Dromore Castle)	12·49	·85	8·02	2·67	3·25	3·17	3·80	7·41	5·12	10·94	8·83	7·66	74·21
Co. Waterford	3	Waterford (Brook Lodge)	4·97	1·76	5·79	1·75	1·99	2·59	3·03	4·29	3·87	6·15	4·14	4·54	44·87
,,	3	Carrick-on-Suir (Seskin)	7·00	1·12	6·10	1·96	2·01	2·81	4·18	6·67	3·91	6·24	5·69	4·69	52·38
Co. Tipperary	1	Nenagh (Traverston)	9·49	·90	5·68	3·36	2·87	2·55	4·09	6·09	4·11	6·94	4·88	4·89	55·85
,,	1	Nenagh (Castle Lough)	7·56	·83	5·01	2·12	1·52	2·11	4·06	5·41	3·51	6·93	4·05	4·66	47·77
,,	3	Clonmel (Coolgreany)	6·38	·97	5·05	3·43	1·85	2·71	2·33	7·46	3·54	6·06	5·05	3·45	48·28
,,	3	Cashel (Ballinamona)	5·73	·99	5·55	1·90	2·73	2·63	3·47	6·26	3·46	6·17	3·74	3·87	46·50
,,	4	Roscrea (Timoney Park)	5·42	·73	3·79	2·91	1·73	2·81	3·26	5·65	3·61	5·51	2·82	4·03	42·27
Co. Limerick	2	Abbeyfeale (Springmount School)	6·70	·55	5·66	2·57	2·01	2·11	3·48	6·37	3·67	7·21	4·06	5·10	49·49
,,	2	Knocklong (Kilfrush)	6·16	1·08	5·29	2·81	1·39	3·45	3·21	6·80	3·81	6·12	3·52	4·07	47·71
,,	2	Foynes (National School)	6·24	·79	3·60	2·42	1·50	2·55	2·87	4·62	3·02	6·53	3·89	5·06	43·09
,,	2	Limerick (Mulgrave Street)	6·01	1·05	4·07	2·08	1·86	2·41	4·01	6·35	4·39	6·43	3·83	4·16	46·65
Co. Clare	2	Kilkee (Marine Parade)	6·61	·88	5·05	2·51	1·98	2·47	3·04	5·53	3·73	6·08	5·55	6·10	49·53
,,	2	Inagh (Mount Callan)	8·40	·61	4·80	3·09	3·07	4·05	5·53	7·22	4·67	10·73	6·47	7·84	66·48
,,	3	Tuamgraney (Raheen Ho.)	7·01	·81	4·79	2·32	2·44	3·12	4·22	5·76	3·70	6·69	4·82	4·73	50·41
Co. Wexford	2	Foulks Mill (Longraigue)	6·64	1·33	5·98	2·15	3·15	2·14	2·84	5·53	4·66	6·33	5·14	5·12	51·01
,,	3	Johnstown Castle	6·50	1·70	6·50	2·63	3·43	2·00	2·42	4·99	4·76	6·60	4·22	5·40	51·15
,,	3	Enniscorthy (Woodbrook)	7·16	2·28	7·80	3·47	3·89	2·57	4·59	7·39	7·08	8·97	5·49	6·17	66·86
,,	4	Gorey (Courtown House)	5·44	1·17	5·30	2·73	2·81	1·46	2·99	4·50	5·38	5·36	3·91	4·51	45·56
Co. Kilkenny	2	Kilkenny Castle	4·59	·63	3·96	1·59	1·69	2·59	3·08	6·06	3·63	4·66	3·42	3·63	39·53

Table XX.—(*con*). *Monthly Rainfall*—**IRELAND**—(*con.*).

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Wicklow ...	3	Rathdrum (Avondale)	7·53	2·27	5·97	2·37	2·94	1·42	3·87	6·58	5·35	7·14	5·25	5·08	55·77
,, ...	4	Newcastle (Killadreenan).....	5·44	1·44	4·12	1·62	2·69	1·08	3·79	5·42	6·29	5·24	4·02	4·61	45·76
Co. Carlow	2	Bagnalstown (Fenagh House)	5·78	·93	4·77	1·71	2·45	2·01	2·71	6·28	4·73	4·91	4·00	3·90	44·18
,, ...	3	Hacketstown Rectory.....	5·21	1·00	5·19	3·01	2·72	2·10	5·22	7·95	6·05	6·17	4·48	4·07	53·17
†Co. Leix	2	Abbey Leix (Blandsfort)	6·02	·95	4·99	2·04	2·05	3·08	3·82	6·42	3·92	4·91	3·41	4·90	46·51
,, ...	3	Mountmellick (Summer Grove)	6·11	·87	3·83	1·85	2·06	2·63	3·72	5·73	4·05	5·35	3·89	4·37	44·46
*Co. Offaly.....	1	Birr Castle	4·92	·55	3·74	1·83	1·65	1·80	3·14	5·71	3·86	4·64	2·94	3·45	38·23
Co. Kildare	2	Straffan House.....	4·33	·98	3·50	2·17	1·72	2·53	4·35	5·31	4·69	4·34	2·75	2·92	39·59
Co. Dublin	2	Howth Castle.....	3·20	1·03	4·13	1·03	2·30	1·73	3·17	5·63	6·09	4·02	2·79	3·12	38·24
, ...	3	Balbriggan (Ardgillan)	4·13	1·12	3·95	1·12	1·62	1·49	3·72	4·64	5·76	3·29	3·64	4·02	38·50
Co. Meath	2	Dunboyne (Stirling, Clonee).....	4·20	1·14	3·87	1·48	2·06	2·17	2·76	5·09	4·95	3·78	2·91	3·34	37·75
,, ...	4	Summerhill House.....	4·40	·75	4·23	1·59	1·85	2·32	3·53	5·84	3·72	4·41	4·00	3·69	40·33
,, ...	4	Kells (Headfort)	4·64	·64	3·70	1·53	1·46	2·48	4·15	6·08	4·64	5·95	4·03	3·75	43·05
Co. Westmeath .	1	Moate (Coolatore)	3·37	·57	3·80	1·30	2·03	1·58	3·66	5·69	3·14	4·50	3·85	3·77	37·26
,, ..	1	Mullingar (Belvedere House).....	4·16	·57	3·82	1·10	1·84	1·63	4·24	6·47	4·67	6·11	4·43	4·06	43·10
,, ..	1	Mullingar (Ballynegall Gdns.)	6·70	·56	3·72	1·84	1·86	1·37	5·21	7·41	5·19	6·14	4·58	4·22	48·80
,, ..	1	Castlepollard (Pakenham Hall)....	3·93	·65	3·44	1·66	1·45	1·31	3·75	7·71	5·06	4·87	5·15	3·68	42·66
Co. Louth.....	2	Dundalk (Aughneskea Reservoir)..	5·21	1·10	2·89	1·88	2·16	2·60	4·51	6·69	4·33	5·01	4·26	4·55	45·19
,, ...	3	Greenore.....	3·63	1·39	2·14	·99	1·66	1·85	2·18	4·50	3·33	4·13	3·16	3·36	32·32
Co. Longford ...	2	Ballymahon (New Castle).....	3·83	·43	3·59	1·57	1·44	1·42	4·15	5·88	3·55	5·89	4·03	3·68	39·46
,, ...	2	Castle Forbes Gardens.....	4·62	·33	4·21	1·82	1·08	1·77	3·26	5·76	3·52	5·64	4·05	3·85	39·91
Co. Galway	3	Galway (Grammar School)..	4·47	·49	3·06	2·26	1·45	2·58	3·54	4·59	3·31	6·35	4·66	4·78	41·54
, ...	3	Ballynahinch Castle	9·03	·93	5·44	2·98	2·65	4·26	5·76	9·62	7·60	10·04	7·83	9·76	75·90
,, ...	3	Portumna.....	4·79	·79	3·54	2·00	1·37	1·72	2·39	5·04	3·27	4·43	3·24	3·42	36·00
,, ...	5	Ahascragh (Clonbrock).....	5·28	·52	3·45	1·86	1·92	2·00	5·02	5·20	4·00	7·03	4·58	5·28	46·14
Co. Roscommon	4	Strokestown (Castlenode).....	4·98	·42	3·79	1·86	2·04	1·88	2·74	5·77	3·98	5·56	4·35	4·04	41·41
,,	4	Boyle.....	4·43	·23	3·01	2·09	1·25	1·88	3·64	5·26	4·20	5·18	4·16	3·59	38·92
Co. Mayo	2	Castlebar Rectory	6·48	1·03	4·29	2·27	2·24	3·14	5·63	7·34	4·06	8·96	5·96	5·61	57·01
,, ...	4	Mallarany.....	7·81	1·25	4·81	3·03	1·85	3·10	6·66	9·85	4·64	4·08	7·78	8·42	63·28
,, ...	5	Aasleagh House.....	18·44	·87	7·64	4·65	3·44	4·74	10·14	10·58	8·14	15·27	12·27	11·06	107·24
,, ...	5	Delphi Lodge	16·71	·81	7·98	5·96	3·48	6·03	10·40	11·08	9·05	15·95	10·73	11·36	109·54
,, ...	6	Tourmakeady (Drimbaun).....	9·75	·41	4·59	1·46	1·59	3·00	4·00	6·83	6·14	9·08	6·38	6·57	59·80

† Formerly called Queen's County.

* Formerly called King's County.

Table XX.—(*con.*) *Monthly Rainfall*—**IRELAND**—(*con.*).

County and River Division.		Station.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Sligo	2	Collooney (Markree Obsy)	4·25	·72	3·09	2·13	2·18	2·92	5·14	7·29	4·01	7·27	4·58	4·91	48·49
,,	2	Sligo (Ard-na-veagh)	4·22	·51	3·25	2·19	2·22	2·78	5·03	7·61	4·58	7·50	4·08	4·92	48·89
Co. Leitrim	5	Cloone	4·14	·27	3·24	1·54	1·73	2·06	3·32	6·85	3·41	6·36	4·66	4·56	42·14
Co. Cavan	1	Crossdoney (Kevit Castle)	4·72	·30	3·17	1·65	1·52	2·49	4·21	5·29	4·88	6·32	4·10	3·88	42·53
,,	1	Belturbet (Cloverhill)	3·69	·37	2·76	1·66	1·42	2·16	3·86	5·28	3·20	4·69	2·66	3·16	34·91
Co. Fermanagh	1	Enniskillen (Portora School)	3·13	·78	2·88	1·41	1·68	2·75	4·50	5·78	2·46	6·42	3·31	4·75	39·85
,,	1	Belleek (Heronshaw)	4·53	·41	2·90	2·09	1·92	3·89	4·89	8·49	3·99	7·15	4·32	4·90	49·48
Co. Armagh	3	Lurgan (Belle Vue)	3·53	1·09	1·82	1·51	1·75	1·86	3·06	5·73	3·41	4·10	2·89	2·72	33·47
,,	5	Armagh Observatory	4·02	·86	2·14	1·52	1·54	1·50	3·27	5·85	3·00	5·35	3·05	2·58	34·68
Co. Down	1	Newry (Bridge Street House)	6·14	1·12	2·91	1·52	1·95	2·17	2·47	6·76	3·69	5·87	4·54	4·28	43·42
,,	2	Seaforde	4·82	·75	2·91	1·38	1·88	1·84	4·19	6·57	4·34	5·76	4·16	3·85	42·45
,,	4	Donaghadee(Coastguard Station)	4·43	·42	1·65	1·31	1·53	2·15	2·76	5·09	3·63	4·78	3·73	3·37	34·85
Co. Antrim	1	Belfast (Queen's University)	4·28	·87	1·97	1·32	1·45	2·24	3·22	6·03	4·55	5·62	4·27	3·25	39·07
,,	2	Larne (Sallagh Springs)	5·96	·79	2·98	1·84	2·58	2·79	4·14	8·13	5·28	7·78	6·27	5·01	53·55
,,	2	Glenarm Castle	5·76	1·36	3·01	2·42	2·48	3·21	4·25	8·17	4·19	7·24	6·92	3·78	52·79
,,	3	Ballycastle (Magherintemple)	4·12	1·34	2·22	2·99	(1·90)	2·68	3·47	7·55	2·62	7·96	5·47	3·27	45·59
,,	5	Ballymena (Harryville)	4·70	·97	2·72	2·21	1·94	2·42	4·11	7·69	3·07	6·90	3·82	4·04	44·59
Co. Londonderry	1	Londonderry (Dunruadh)	3·93	1·52	3·08	1·88	1·55	2·52	3·75	7·57	2·73	6·64	4·52	4·10	43·79
,,	5	Glenedra Lodge	5·62	1·82	3·67	3·50	2·34	2·43	5·09	11·25	4·27	9·48	7·69	7·66	64·82
,,	5	Limavady (Drenagh)	3·06	·76	2·13	1·69	1·05	2·47	2·57	6·65	1·72	4·89	4·18	3·28	34·45
Co. Tyrone	2	Donaghmore	4·88	1·13	2·41	2·51	1·66	2·20	5·44	7·35	3·15	6·01	4·92	3·94	45·60
,,	3	Omagh (Edenfel)	4·51	·58	3·49	2·06	2·19	2·04	3·75	6·90	2·94	6·77	4·55	4·40	44·18
,,	3	Sion Mills (Sion House)	5·06	·52	3·15	1·92	1·89	2·97	4·51	6·55	2·72	6·16	4·40	4·60	44·45
Co. Donegal	1	Malin Head	4·36	1·21	2·23	1·86	1·05	2·87	3·04	5·37	2·70	5·43	4·74	4·10	38·96
,,	3	Milford (The Manse)	4·00	1·08	3·35	2·12	1·16	2·86	4·61	6·45	3·21	7·33	4·47	4·63	45·27
,,	3	Dunfanaghy (St. Patrick's)	6·61	·80	2·81	2·33	1·06	2·62	2·66	4·85	2·19	5·99	4·90	4·36	41·18
,,	5	Killybegs (Rockmount)	4·60	·87	4·05	2·76	1·99	3·15	4·71	7·07	3·73	9·24	5·49	4·59	52·25

Table XXI.—*Monthly Rainfall in* 1930; *the Average,* 1881–1915, *being taken as* 100.

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
London..... 2	St. Pancras (Camden Square).....	135	60	87	121	152	157	84	133	197	48	181	82	118
Kent..... 1	Tenterden (Ashenden).....	132	89	86	100	215	55	161	161	153	60	177	90	120
,, ... 2	St. Peter's.....	135	116	122	112	187	75	137	129	236	52	175	97	128
,, ... 4	Edenbridge (Falconhurst)	163	52	50	84	146	34	99	117	165	44	168	83	100
Sussex..... 1	Compton (Compton House).....	175	52	58	127	100	23	99	135	103	54	174	116	103
,, ... 3	Brighton W.W. (Lewes Road).....	142	62	82	120	135	42	120	195	153	82	198	104	122
Hampshire..... 1	Ventnor (Royal National Hosp.)...	172	61	67	173	109	38	77	151	124	86	159	108	112
,, ... 3	Fordingbridge (Oaklands)	180	33	58	135	130	25	109	183	202	54	168	102	114
,, ... 8	Sherborne St. John.....	178	37	55	117	90	28	76	99	185	41	165	87	95
Hertfordshire.... 3	Royston (Therfield Rectory).....	127	30	81	124	168	88	116	101	235	40	184	106	116
Buckinghamshire 3	Slough (Upton)	162	35	73	124	126	27	83	128	162	35	163	86	98
Oxfordshire..... 3	Oxford (Magdalen College).....	144	34	74	134	112	40	126	82	199	45	190	121	106
Northamptonshire 4	Pitsford (Sedgebrook).....	172	41	102	148	141	60	122	99	224	55	145	85	113
Cambridgeshire.. 2	March	130	56	94	189	218	61	207	90	198	32	159	82	124
Essex 4	Chelmsford (County Laboratory)..	118	38	72	160	142	28	128	92	209	43	164	107	106
Suffolk.. 1	Hawkedon Rectory.....	106	47	72	191	164	39	186	102	232	41	189	93	120
,, ... 3	Rendlesham Hall.....	104	66	78	104	144	63	162	228	334	29	165	90	131
,, ... 4	Lowestoft (Secondary School).....	98	69	66	110	157	54	149	119	268	29	156	85	113
Norfolk..... 1	Norwich (Eaton)	97	64	72	125	159	46	147	101	264	27	151	73	109
,, ... 4	Little Dunham (Dunham Cot.)....	107	91	76	149	162	56	197	131	253	35	154	92	125
Wiltshire 1	Calne (Castleway)	172	27	109	141	73	83	114	103	178	73	194	111	115
Dorsetshire 3	Weymouth (Westham House).....	142	43	61	126	137	28	88	136	156	69	179	128	110
South Devonshire 2	Launceston (Polapit Tamar)	189	53	95	104	93	38	89	128	189	150	145	94	119
,, 4	Ashburton (Druid House)	187	36	78	131	68	14	97	154	230	103	166	73	112
,, 6	Cullompton.....	189	44	107	171	86	24	70	135	222	106	178	103	121
North Devonshire 2	Barnstaple (N. Dev. Athenæum)...	176	48	113	136	114	26	94	123	180	128	100	136	118
Cornwall..... 2	Penzance (Morrab Gardens).....	217	101	115	97	94	63	111	151	196	123	143	78	125
,, ... 2	St. Austell (Trevarna).....	190	49	123	112	129	35	108	187	211	126	162	87	127
Somersetshire ... 1	Chewton Mendip (The Priory).....	161	22	73	91	94	21	103	161	149	89	144	86	102
Gloucestershire.. 7	Cirencester (Gwynfa)	187	23	88	134	65	92	130	105	163	72	125	107	107
Shropshire..... 3	Church Stretton (Wolstaston).....	264	48	163	162	127	40	219	88	191	108	133	133	137
Staffordshire 2	Market Drayton (Old Springs).....	228	24	146	155	89	46	231	97	164	97	109	123	129

Table XXI.—*Monthly Rainfall in* 1930; *the Average,* 1881–1915, *being taken as* 100 (*con.*)

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Worcestershire .. 1	Malvern (Free Library)	233	38	125	166	105	66	140	121	245	90	141	134	132
Warwickshire ... 1	Alcester (Ragley Hall)	226	59	108	193	130	83	118	96	185	97	145	133	128
.. 4	Birmingham (Edgbaston)	246	53	141	155	97	58	192	117	224	102	138	107	133
Leicestershire ... 4	Belvoir Castle Gardens	156	30	87	173	99	39	132	79	202	58	132	91	104
Lincolnshire..... 3	Boston (Black Sluice, Skirbeck) ...	119	48	106	166	132	60	112	114	208	35	153	73	107
,, ... 3	Lincoln (Skellingthorpe Hall)	157	33	144	236	67	65	188	123	234	75	142	83	124
Derbyshire..... 6	Derby (L.M. & S. Rly.)	180	44	165	168	159	78	240	87	241	117	135	75	137
S. Lancashire.... 3	Manchester (Whitworth Park).....	160	15	117	85	92	94	186	131	122	138	164	97	122
C. ,, .. 1	Stonyhurst College	141	12	77	80	105	103	155	147	92	178	133	74	112
C. ,, ... 3	Southport (Hesketh Park)	191	16	139	147	48	65	121	170	87	155	153	126	124
N. ,, ... 1	Ulverston (Poaka Beck)	182	12	64	98	60	59	117	171	79	183	116	115	112
Yorkshire, Wr. .. 7	Rotherham (Sitwell Vale)	179	41	132	167	80	25	243	103	233	75	135	74	121
,, ,,....9	Bradford (Lister Park)	189	50	119	163	75	109	211	155	235	105	153	92	137
,, ,,...10	York (Cherry Hill)	173	57	87	144	55	80	190	131	181	61	150	89	116
,, E.R... 3	Hull (Pearson Park)	139	38	97	122	90	71	201	102	166	64	162	79	110
,, N.R... 1	Leyburn (Bolton Hall)	220	46	97	222	52	51	182	241	213	92	121	128	137
,, ,,... 2	Felixkirk (Mount St. John)	199	78	141	255	71	94	252	102	241	84	148	116	146
,, ,,... 5	Scarborough	149	91	127	181	56	86	232	110	201	47	179	89	127
,, ,,... 6	Middlesborough (Albert Park).....	169	96	180	143	58	61	191	123	153	69	146	92	122
Northumberland. 3	Newcastle (Town Moor)	157	106	84	95	64	28	150	172	140	50	112	91	105
,, . 4	Hallington (Fawcett) (Newc. W.W.)	162	97	101	100	66	41	197	157	119	92	156	74	116
,, . 6	Ilderton (Lilburn Tower Gdns.).....	131	102	112	112	60	46	276	149	147	59	128	142	122
Cumberland..... 1	Carlisle (Scaleby)	177	16	108	85	48	111	193	170	77	138	128	64	116
,, ... 2	Keswick (Derwent Island)	192	10	51	48	78	103	117	171	80	193	111	85	108
Westmorland.... 1	Appleby (Castle Bank)	206	10	103	98	81	66	125	166	96	159	125	96	115
Monmouthshire.. 3	Abergavenny (Larchfield)	247	28	136	166	49	16	119	150	215	99	123	124	123
Glamorganshire.. 3	Ystalyfera (Wern House)	211	12	72	106	103	98	139	144	159	153	144	110	124
,, .. 5	Cardiff (Ely Pumping Station)	164	25	78	95	62	29	98	136	147	111	118	85	100
Carmarthenshire. 2	Carmarthen (The Friary)	218	14	85	98	85	86	130	105	171	137	112	128	118
Pembrokeshire .. 4	Haverfordwest (Grammar School)..	187	17	110	118	91	87	121	116	183	130	104	122	119
Radnorshire..... 1	Birmingham W.W. (Tyrmyndd)...	163	17	70	119	102	57	155	132	206	132	122	102	115
Montgomeryshire 3	Llangurig (Dernol)	132	15	66	105	99	32	142	106	200	145	151	92	109

Table XXI.—*Monthly Rainfall in* 1930; *the Average,* 1881–1915, *being taken as* 100 (*con.*)

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Montgomeryshire 5	Lake Vyrnwy (Bank Cynon Isaf)	150	21	91	141	85	83	129	101	176	144	163	130	121
Flintshire 1	Northop (Soughton Hall)	184	36	169	176	82	71	180	127	139	139	137	144	134
Merionethshire 4	Dolgelly (Bryntirion)	163	18	74	85	128	86	173	158	116	156	145	140	125
Carnarvonshire 2	Llandudno	184	16	148	148	67	60	74	106	123	129	139	145	115
,, 3	Llandwrog (Glynllivon Park)	209	7	94	105	71	75	101	161	107	150	116	132	116
Anglesey	Holyhead (Salt Island)	202	19	142	101	64	73	100	151	117	153	113	123	119
Isle of Man	Douglas (Borough Cemetery)	188	21	102	91	76	90	92	160	191	174	131	141	129
Wigtownshire 3	Port William (Monreith)	172	12	80	81	50	92	92	130	152	182	120	114	112
Kirkcudbrightshire 3	Dalry (Glendarroch)	167	7	72	80	67	104	167	177	124	175	107	93	113
,, 4	Auchencairn (Torr House)	169	13	86	82	56	93	60	160	120	183	116	82	106
Dumfriesshire 3	Dumfries (Crichton Roy. Inst.)	161	6	89	54	64	78	112	186	109	165	118	109	109
Roxburghshire 3	Hawick (Wolfelee)	150	27	74	76	65	109	151	149	106	146	117	92	107
Peebleshire 2	Stobo Castle	186	23	61	70	58	82	93	205	151	152	144	92	115
Berwickshire 4	Marchmont House	94	75	89	108	38	71	118	142	186	101	146	96	107
Haddingtonshire 5	North Berwick Reservoir	98	87	95	89	43	96	155	148	159	64	137	59	106
Midlothianshire 5	West Calder (Addiewell)	188	13	94	48	76	107	133	126	114	128	135	59	102
,, 5	Edinburgh (Univ. Eng. Lab.)	138	22	94	92	43	84	135	161	180	99	154	79	112
Ayrshire 3	Kilmarnock (Agricultural Coll.)	143	7	84	82	67	138	80	139	90	173	129	94	106
,, 8	Girvan (Pinmore)	131	7	87	72	70	81	95	149	144	181	121	92	106
Renfrewshire 3	Shaws W.W. (Loch Thom)	163	12	105	62	87	106	89	131	100	195	134	92	110
Bute 1	Rothesay (Ardencraig)	130	7	91	103	83	109	114	166	115	217	142	141	122
Argyllshire 2	Loch Sunart (Glen Borrodale)	138	11	89	66	92	132	47	145	65	160	126	94	99
,, 8	Lochgilphead (Poltalloch)	139	9	81	84	77	116	80	170	84	188	143	115	111
,, 11	Inveraray Castle Gardens	149	9	80	53	100	121	127	189	87	184	133	77	110
,, 14	Islay (Ardbeg)	110	16	87	85	65	129	79	191	99	210	128	106	112
Kinross-shire 2	Loch Leven Sluice	114	40	81	84	78	109	105	168	177	104	114	69	105
Perthshire 1	Loch Dhu	152	9	92	56	96	103	105	133	98	161	99	88	101
,, 7	Crieff (Strathearn Hydro)	129	23	70	64	70	76	96	141	161	118	88	118	99
,, 14	Blair Atholl (Blair Castle Gdns.)	166	20	50	82	76	123	69	171	155	187	123	121	116
Angus (Forfar) 2	Dundee (Eastern Necropolis)	101	80	80	131	76	105	84	180	225	104	151	111	121
,, 4	Montrose (Sunnyside Asylum)	87	55	63	137	81	96	72	208	239	97	135	131	119
Aberdeenshire 1	Balmoral (Castle Gdns.)	112	67	64	140	62	99	122	180	234	121	106	114	118
,, 2	Aberdeen (King's College)	85	55	55	165	42	129	50	218	204	102	120	123	112

Table XXI.—*Monthly Rainfall in* 1930 ; *the Average,* 1881–1915, *being taken as* 100 (*con.*)

County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Aberdeenshire ... 4	New Deer Schoolhouse	77	61	59	141	47	106	71	253	269	121	140	100	123
Morayshire..... 2	Gordon Castle.....	82	41	54	95	55	55	129	161	185	139	153	61	107
,, ... 3	Grantown-on-Spey	109	36	58	93	65	70	108	146	171	93	133	77	99
Nairnshire 2	Nairn (Delnies)	108	34	54	80	75	65	92	216	138	158	210	88	115
Inverness-shire .. 3	Alvie Manse	146	30	53	56	40	55	157	123	177	137	158	66	105
,, .. 6	Fort Augustus (St. Benedict's)	180	12	52	49	93	130	71	139	102	172	103	66	99
,, .. 7	Loch Quoich (Glenquoich)	145	9	72	69	134	126	53	145	80	189	147	85	106
,, ..13	Arisaig House.....	145	16	93	65	81	141	60	155	76	165	141	94	106
,, ..17	Fort William	172	9	70	44	103	167	57	129	82	176	115	76	101
Ross and Cromarty 4	Alness (Ardross Castle).....	106	37	60	75	98	85	85	239	114	159	179	79	112
,, 7	Ullapool	133	20	65	53	94	129	60	199	86	147	158	87	104
,, 8	Loch Torridon (Bendamph).....	156	14	87	49	90	104	36	154	77	135	85	75	91
,, 10	Stornoway	128	17	75	66	97	112	47	121	71	153	101	87	92
Sutherlandshire.. 1	Lairg.....	91	51	60	58	78	99	67	211	101	160	165	58	103
,, .. 4	Tongue	95	41	104	37	89	114	98	183	83	126	161	56	100
,, .. 5	Loch More (Achfary).....	138	29	88	61	122	142	51	165	83	144	159	87	107
Caithness-shire .. 2	Wick	82	54	70	107	73	177	52	203	155	123	123	66	107
Orkney.....	Pomona (Deerness)	89	28	62	106	135	105	63	145	153	129	108	89	100
Co. Cork..... 6	Dunmanway (The Rectory).....	184	19	163	57	81	97	96	119	124	114	119	76	105
,, ,, ... 7	Glanmire (Lota Lodge) No. 1.....	157	27	232	67	82	95	79	155	193	126	123	81	117
,, ,, ... 9	Mallow (Longueville).....	182	12	217	97	66	123	94	183	164	151	106	78	122
,, Kerry..... 3	Cahirciveen (Valentia Obsy.).....	200	23	144	84	97	114	109	166	116	134	116	94	118
,, ,, ... 3	Gap of Dunloe (Gearhameen)	180	20	138	85	69	92	101	116	144	147	109	89	110
,, Waterford... 3	Waterford (Brook Lodge).....	135	54	211	69	86	96	93	112	140	157	110	97	114
,, Tipperary ... 1	Nenagh (Castle Lough).....	191	27	162	84	62	86	129	137	125	204	101	101	121
,, ,, ... 3	Cahir (Abbey)	151	27	187	72	92	101	97	173	118	170	112	92	118
,, Limerick.... 2	Foynes (Coolnanes)	211	19	123	81	64	89	97	131	134	185	100	110	116
,, Wexford 4	Gorey (Courtown House).....	174	42	229	125	127	60	102	135	218	151	112	118	131
,, Kilkenny.... 2	Kilkenny Castle.....	143	25	173	73	76	107	109	174	157	148	108	105	119
,, Carlow..... 2	Bagnalstown (Fenagh Ho.)	184	37	196	75	100	81	86	178	192	147	119	103	126
†,, Leix..... 2	Abbey Leix (Blandsfort).....	184	35	191	78	84	119	122	163	144	139	102	133	127

† Formerly called Queen's County.

Table XXI.—*Monthly Rainfall in* 1930; *the Average,* 1881–1915, *being taken as* 100 (*con.*)

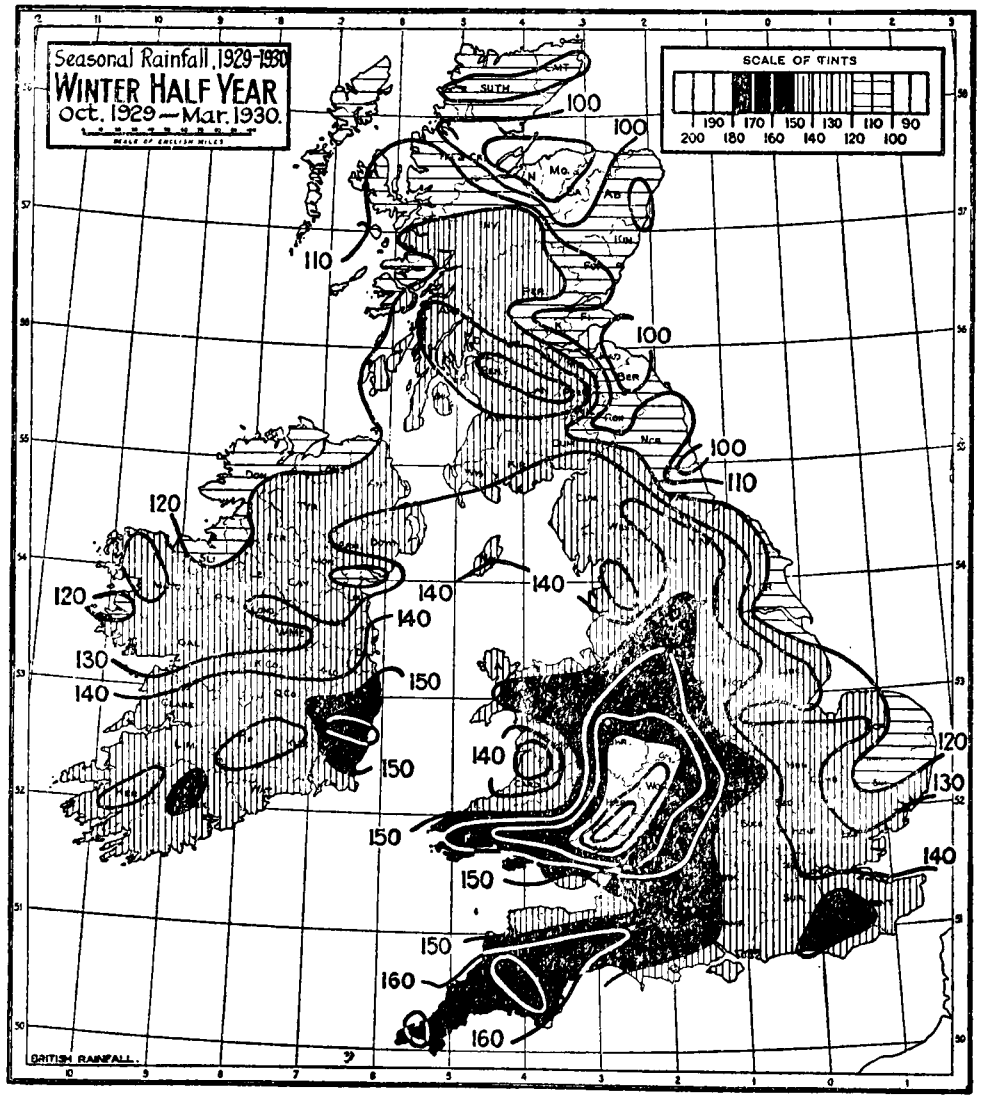
County and River Division.	Station.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
§Co.Offaly 1	Birr Castle	174	24	156	85	74	78	107	150	168	159	95	105	117
,, Kildare 2	Straffan House	168	45	151	110	78	111	154	141	210	153	88	96	126
,, Dublin 3	Balbriggan (Ardgillan) No. 1	180	57	197	57	78	74	137	136	282	122	126	139	133
,, Meath 4	Kells (Headfort)	147	24	135	61	54	94	131	147	175	178	119	98	116
,, Westmeath .. 1	Mullingar (Belvedere)	130	21	142	46	75	63	133	155	175	196	130	110	119
,, Louth 3	Greenore	145	60	93	45	72	75	76	128	144	146	103	103	101
,, Longford 2	Castle Forbes Gardens	139	12	143	76	42	69	104	141	122	173	113	97	106
,, Galway 3	Ballynahinch Castle	145	18	106	84	74	120	139	175	160	168	131	130	124
,, ,, ... 5	Ahascragh (Clonbrock)	136	17	104	73	69	71	144	124	129	193	114	112	110
,, Mayo 3	Blacksod Point	176	17	111	75	41	103	198	175	99	151	98	117	117
,, ,, ... 4	Westport House	181	20	103	70	59	80	141	143	112	185	104	107	113
,, ,, ... 5	Delphi Lodge	169	10	96	104	58	105	156	129	120	168	103	93	111
,, Sligo 2	Collooney (Markree Observatory) ..	109	21	91	81	80	99	149	169	118	179	108	103	112
,, Cavan 1	Belturbet (Cloverhill)	123	14	100	72	57	89	124	142	129	161	86	85	101
,, Armagh 5	Armagh Observatory	160	39	91	72	65	60	113	162	122	197	107	82	109
,, Down 2	Seaforde	153	25	100	53	71	67	131	175	158	162	110	93	111
,, Antrim 1	Belfast (Queen's University)	149	35	76	58	63	89	108	163	177	171	127	88	113
,, ,, ... 5	Ballymena (Harryville)	127	30	86	84	68	83	120	180	99	187	94	91	107
,, Londonderry 5	Londonderry (Creggan Reservoir) ..	117	36	98	77	63	111	119	175	88	201	110	100	112
,, ,, 5	Limavady (Drenagh)	95	26	72	74	46	95	82	174	59	142	113	87	93
,, Tyrone 3	Omagh (Edenfel)	127	19	111	78	85	72	110	162	96	185	120	104	110
,, Donegal 3	Milford (The Manse)	107	33	99	83	46	104	140	154	99	183	103	99	108
England	(general mean*, 57 stations)	**167**	**50**	**98**	**137**	**108**	**58**	**149**	**132**	**185**	**82**	**152**	**98**	..‡
Wales	(,, ,, 13 ,,)	**186**	**19**	**103**	**120**	**84**	**66**	**128**	**130**	**158**	**137**	**130**	**121**	..
England and Wales ..	(,, ,, 70 ,,)	**170**	**44**	**99**	**134**	**103**	**59**	**145**	**132**	**180**	**92**	**148**	**102**	..
Scotland	(,, ,, 44 ,,)	**131**	**28**	**76**	**81**	**76**	**106**	**91**	**167**	**134**	**148**	**132**	**90**	..
Ireland	(,, ,, 35 ,,)	**155**	**28**	**138**	**76**	**72**	**91**	**118**	**153**	**143**	**164**	**110**	**100**	..
British Isles †	(,, ,, 150 ,,)	**155**	**36**	**101**	**105**	**88**	**81**	**122**	**147**	**158**	**126**	**134**	**98**	..

§ Formerly called King's County.

*The "general" values given in the last six rows are obtained by taking the means of the percentage values for the stations. † Including Isle of Man. ‡See Table XXIII.

9. SEASONAL RAINFALL, 1929-30.

There are definite advantages in considering the rainfall of the winter and summer separately. One defect of the calendar year

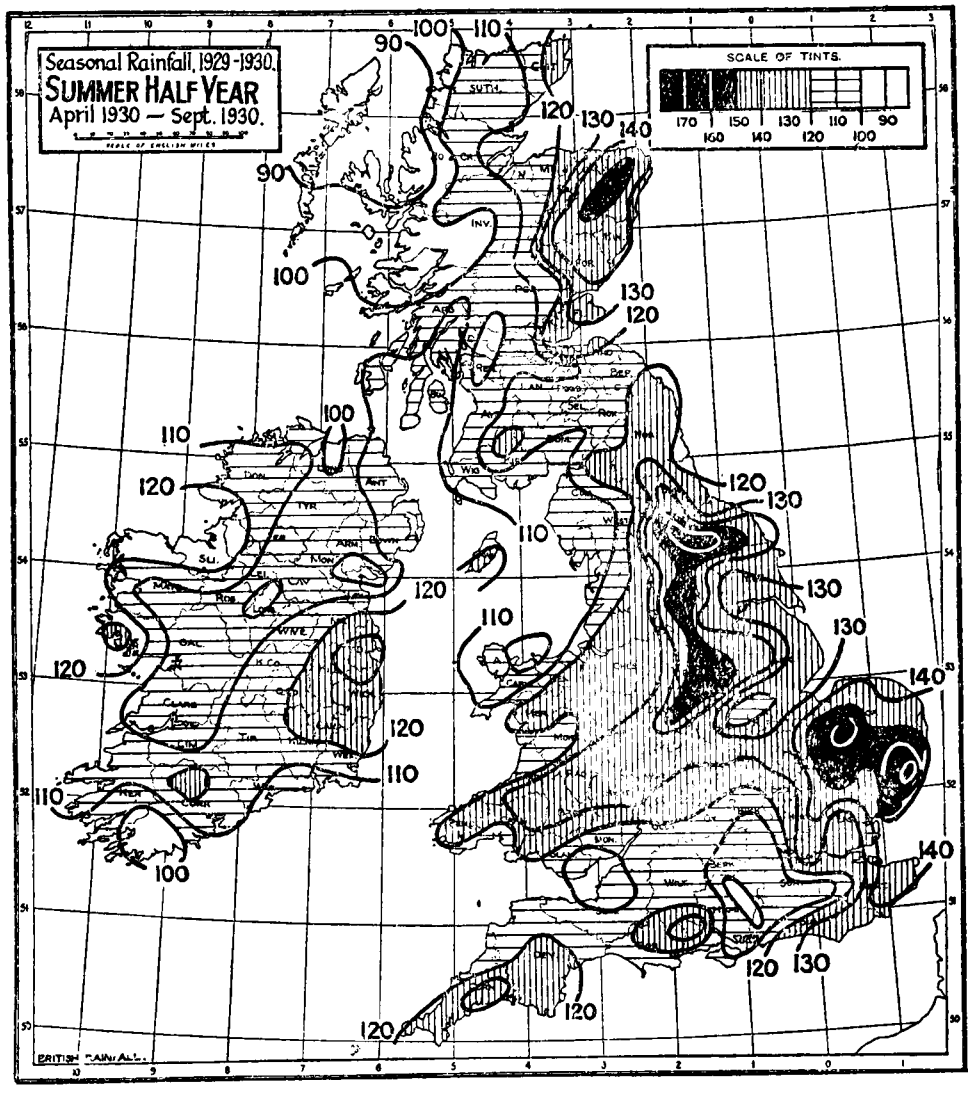


Rainfall, Winter Half-year, as per cent. of average.

as a unit of time for rainfall purposes is that part of a winter is included in one calendar year and the other part in another year.

Winter rainfall has a special economic importance, for, except in the wettest areas, the summer rainfall is, for the most part, lost by evaporation or absorbed by vegetation.

In this section the rainfall of the winter season, 1st October, 1929, to 31st March, 1930, and of the summer season, 1st April,

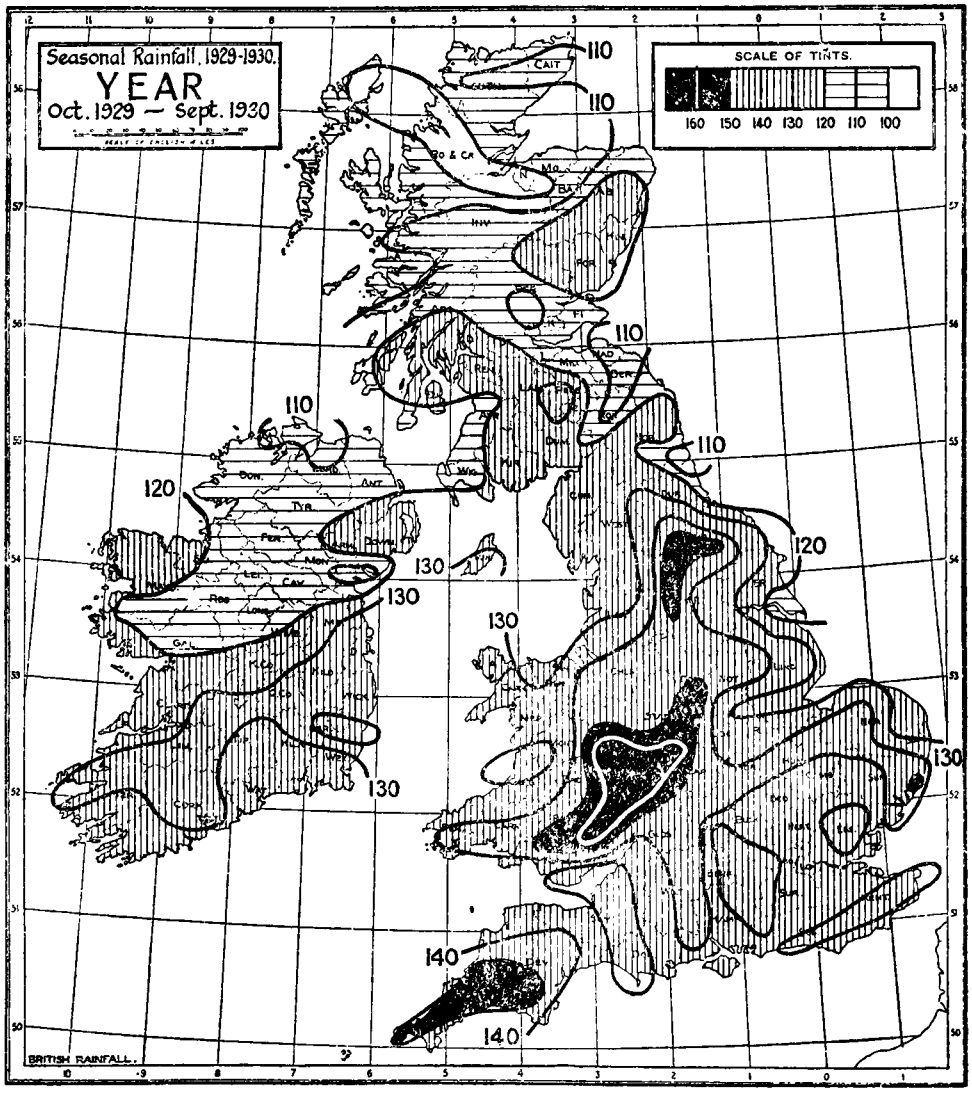


Rainfall, Summer Half-year, as per cent. of average.

1930, to 30th September, 1930, is dealt with, as well as the rainfall of the whole seasonal year, 1st October, 1929, to 30th September, 1930. It is natural to associate a summer season with the preceding rather than with the following winter season, since the water required in summer for replenishing streams and for the needs of animal and

vegetable life is derived, in part, from that which has been naturally stored during the previous winter season. One section of *British Rainfall* has been devoted to this subject since the volume for 1908, and three maps and Table XXII similar to those introduced in that volume, are now reproduced.

Table XXII contains rainfall values for each of these two seasons



Rainfall, Seasonal Year, as per cent. of average.

for the stations shown in Section 8 on Monthly Rainfall. The values are expressed as percentages of the average fall for the season and the station. The table gives in the fourth column the corresponding percentages for each station for the whole of the seasonal year. These last figures are not always the mean of the percentages for

the two seasons, but often show a bias towards the winter value rather than that of the summer. This is due to the fact that the average rainfall for the winter is, in general, greater than that for the summer.

The *winter* half-year contained five wet months, in three of which, *viz.*, November and December, 1929, and January, 1930, the rainfall exceeded 150 per cent. of the average over the country as a whole. Some details of the wet period, October to December, 1929, are set out in *British Rainfall*, 1929, pages 272–281. The general rainfall over the British Isles of the four months, October, 1929, to January, 1930, amounted to 27·0 inches, or more than usually falls in the first 8½ months of the year. The four months, October, 1929, to January, 1930, were wetter than any similar period over the British Isles as a whole since 1870, the next wettest period being October, 1876 to January, 1877 with 25·2 inches. The rainfall of these months was so remarkable that the whole of the winter of 1929 to 1930 was wetter than that of any other winter in the series back to before 1881. The map shows that the rainfall of the winter exceeded the average in all parts of the British Isles, with the exception of a broad strip across Scotland from Loch Broom to Balmoral, parts of Berwickshire and Haddingtonshire, and the neighbourhood of Middlesborough. In the neighbourhood of the Moray Firth the rainfall was about 85 per cent. of the average. Falls of 150 per cent. and more were confined to the south-east of Ireland, the south-west of England and Wales, and the south-east of England from Brighton to Maidstone. More than twice the average was recorded locally in Monmouthshire and Herefordshire. The range in the percentage values at the stations of Table XXII is from 84 at Grantown-on-Spey and Nairn to 204 at Abergavenny.

The general rainfall of the winter 1929 to 1930 amounted to 31·4 inches, compared with 30·6 inches in the next wettest winter, *viz.*, that of 1911 to 1912. The rainfall was most remarkable in England and Wales, where the winter was appreciably wetter than that of any other winter back to before 1907. In Ireland, the winter of 1911 to 1912 was equally wet, while in Scotland the winters of 1912 to 1913, 1919 to 1920 and 1927 to 1928 were wetter.

The *summer* half-year consisted of four wet and two dry months. The rainfall was perhaps most striking in September, when large excesses occurred along the east of Great Britain and of Ireland. The distribution in this month is reproduced on the seasonal map, where the largest excesses occurred in similar areas. As was the case with the map for the winter half year, only small areas recorded less than the average. These areas occurred in the north-west of Scotland, near Glasgow, near Llandudno, in parts of Co. Londonderry,

Co. Longford, Co. Louth and Co. Cork, and near Winchester. There was more than 150 per cent. in Aberdeenshire, along a broad strip stretching from Darlington to Derby and over much of East Anglia. The percentage values in Table XXII vary from 85 at Stornoway, to 177 at Rendlesham Hall, in Suffolk. The percentage figure for the summer over the British Isles was 119, but this was appreciably less than that of the recent wet summers of 1927 and 1924, with 135 and 144, respectively. The only other wetter summers in the series back to 1881 were, however, those of 1882 and 1903, with 126 and 127 per cent. There was an excess in England and Wales of 27 per cent., in Scotland of 12 per cent., and in Ireland of 13 per cent. There were five wetter summers in England and Wales since 1907, in Scotland three and in Ireland only one, *viz.*, that of 1924 with an excess of 46 per cent. In view, therefore, of the usually greater uniformity of the rainfall over Ireland than that over England and Wales, the rainfall of the summer of 1930 was, perhaps, most striking in Ireland, although the actual excess was relatively small.

The map for the *seasonal year* is necessarily similar to those of the seasonal maps. Thus there is a deficiency only in the north of Scotland, from Stornoway to Grantown-on-Spey, and this is associated with the deficiency in the west of that area in the summer and in the east during the winter. Again, the largest percentage values on the map for the seasonal year occur in those areas where the largest percentage values occurred on the winter map, *viz.*, near Herefordshire. There are four areas with more than 150 per cent. :—part of the Devon–Cornwall peninsula, from Swansea to Birmingham, to the north-west of York, and near Rendlesham Hall in Suffolk. The general rainfall of the seasonal year was 128 per cent. or 53·0 inches and this is larger than that of any other seasonal year back to 1881, the next wettest seasonal year being 1911 to 1912 with 123 per cent. or 51·1 inches. There was an excess of 38 per cent. in England and Wales, of 14 per cent. in Scotland and of 25 per cent. in Ireland. The rainfall was most striking in Ireland, where the year was appreciably wetter than any other year since 1906. In England and Wales, 1911 to 1912 was nearly as wet with an excess of 34 per cent., while in Scotland, 1926 to 1927 was appreciably wetter.

The main features of the rainfall of the seasonal year were (*a*) the abnormally wet first four months; (*b*) the wet summer, especially in Ireland and along the east coast of Great Britain; (*c*) the very large part of the British Isles with an excess of rainfall for the whole year, and (*d*) the large excesses for the year in Ireland and parts of England and Wales.

In *British Rainfall*, 1927, p. 125, a table was reproduced of the

serial general values of seasonal rainfall for the British Isles from 1881 to 1927. It will be recalled that since about 1907 wet years have predominated. Initially the excesses were mainly due to wet winters, of more recent years the summers were particularly wet, while in 1928, 1929 and 1930 there was a reversion to the earlier type.

In *British Rainfall*, 1926, p. 125, values are given for England and Wales, Scotland and Ireland separately back to 1906–1907. In Scotland the summer of 1930 was the ninth consecutive wet summer, and the accumulated excess during the last nine years practically amounts to as much rain as usually falls in ten and a half years. Recent winters in Ireland are also remarkable for during the last 19 years, *i.e.*, since the winters of 1911 and 1912, there has been an excess in all but three occasions.

Table XXII.—*Seasonal Rainfall, 1929–30, in relation to the Average, 1881–1915.*

Station.‡	Winter 6 Months, Oct. 1929–Mar. 1930. Per cent. of Average.	Summer 6 Months, Apl. 1930–Sept. 1930. Per cent. of Average.	Twelve Months, Oct. 1929–Sept. 1930. Per cent. of Average.	Station.‡	Winter 6 Months, Oct. 1929–Mar. 1930. Per cent. of Average.	Summer 6 Months, Apl. 1930–Sept. 1930. Per cent. of Average.	Twelve Months, Oct. 1929–Sept. 1930. Per cent. of Average.
St. Pancras (Camden Square)....	137	138	138	St. Austell (Trevarna).....	163	135	152
Tenterden (Ashenden).....	150	140	146	Chewton Mendip (The Priory)....	146	108	129
St. Peter's	146	148	147	Cirencester (Gwynfa).....	163	114	141
Edenbridge (Falconhurst)	157	108	136	Church Stretton (Wolstaston)...	188	133	162
Compton (Compton House).....	146	98	126	Market Drayton (Old Springs)...	166	128	147
Brighton W.W. (Lewes Road)....	155	131	145	Malvern (Free Library).....	197	136	168
Ventnor (Royal National Hosp.)..	148	112	133	Alcester (Ragley Hall).....	173	128	151
Fordingbridge (Oaklands).....	156	135	148	Birmingham (Edgbaston).....	187	136	162
Sherborne St. John.....	142	98	123	Belvoir Castle Gardens.....	127	116	122
Royston (Therfield Rectory).....	134	135	134	Boston (Black Sluice, Skirbeck)..	131	129	130
Slough (Upton).....	145	106	127	Lincoln (Skellingthorpe Hall)....	140	144	142
Oxford (Magdalen College).....	143	111	128	Derby (L.M.&S. Rly)	150	157	153
Pitsford (Sedgebrook).....	152	129	141	Manchester (Whitworth Park)...	155	124	140
March	134	156	145	Stonyhurst College.....	129	118	124
Chelmsford (County Laboratory).	136	122	129	Southport (Hesketh Park).....	147	111	130
Hawkedon Rectory.....	120	148	134	Ulverston (Poaka Beck).....	137	104	122
Rendlesham Hall.....	129	177	152	Rotherham (Sitwell Vale).....	141	139	140
Lowestoft (Secondary School)....	114	145	129	Bradford (Lister Park).....	153	159	156
Norwich (Eaton).....	115	142	128	York (Cherry Hill).....	138	130	134
Little Dunham (Dunham Cot.)..	132	160	146	Hull (Pearson Park).....	113	125	119
Calne (Castleway)	156	114	137	Leyburn (Bolton Hall).....	142	165	151
Weymouth (Westham House)....	140	113	129	Felixkirk (Mount St. John).....	140	166	153
Launceston (Polapit Tamar).....	176	111	151	Scarborough.....	117	144	130
Ashburton (Druid House).....	171	121	153	Middlesborough (Albert Park)...	121	124	123
Cullompton.....	169	119	148	Newcastle (Town Moor).....	99	114	106
Barnstaple (N. Dev. Athenæum)..	148	114	134	Hallington (Fawcett).....	117	122	119
Penzance (Morrab Gardens).....	172	123	153	Ilderton (Lilburn Tower Gardens)	115	136	125

‡ For Counties see Table XXI, pp. 113–117.

Table XXII.—*Seasonal Rainfall, 1929–30, in relation to the Average, 1881–1915—(con.).*

Station.‡	Winter 6 Months, Oct. 1929–Mar. 1930. Per cent. of Average.	Summer 6 Months, Apl. 1930–Sept. 1930. Per cent. of Average.	Twelve Months, Oct. 1929–Sept. 1930. Per cent. of Average.	Station.‡	Winter 6 Months, Oct, 1929–Mar. 1930. Per cent. of Average.	Summer 6 Months, Apl. 1930–Sept. 1930. Per cent. of Average.	Twelve Months, Oct. 1929–Sept. 1930. Per cent. of Average.
Carlisle (Scaleby)	131	124	128	Girvan (Pinmore)	122	107	115
Keswick (Derwent Island)	136	106	124	Shaws W.W. (Loch Thom.)	141	98	123
Appleby (Castle Bank)	145	111	130	Rothesay (Ardencraig)	134	119	127
Abergavenny (Larchfield)	204	119	169	Loch Sunart (Glen Borrodale)	117	90	106
Cardiff (Ely Pumping Station)	165	128	150	Lochgilphead (Poltalloch)	131	105	120
Glyncorrwg Colliery	146	101	127	Inveraray Castle Gardens	131	116	125
Carmarthen (The Friary)	171	114	147	Islay (Ardbeg)	129	112	121
Haverfordwest (Grammar School)	166	122	148				
Birmingham W.W. (Tyrmyndd)	140	131	137	Loch Leven Sluice	105	126	114
Llangurig (Dernol)	123	116	120	Loch Dhu	125	100	116
				Crieff (Strathearn Hydro)	110	107	109
Lake Vyrnwy (Bank Cynon Isaf)	153	119	139	Blair Atholl (Blair Castle Gardens)	126	117	122
Northop (Soughton Hall)	152	129	142	Dundee (Eastern Necropolis)	113	136	124
Dolgelly (Bryntirion)	143	128	137	Montrose (Sunnyside Asylum)	108	141	124
Llandudno	142	97	122				
Llandwrog (Glynllivon Park)	152	107	134	Balmoral Castle Gardens	106	144	122
Holyhead (Salt Island)	147	106	130	Aberdeen (King's College)	111	133	121
Douglas (Borough Cemetery)	140	123	133	New Deer Schoolhouse	110	152	129
Port William (Monreith)	132	104	120	Gordon Castle	87	121	103
Dalry (Glendarroch)	127	126	127	Grantown-on-Spey	84	112	98
				Nairn (Delnies)	84	117	100
Auchencairn (Torr House)	140	101	123	Alvie Manse	121	108	115
Dumfries (Crichton Roy. Inst.)	131	108	121				
Hawick (Wolfelee)	106	114	110	Fort Augustus (St. Benedict's)	123	98	114
Stobo Castle	148	118	135	Loch Quoich (Glenquoich)	126	100	116
Marchmont House	96	113	104	Arisaig House	124	97	112
North Berwick Reservoir	95	122	109	Fort William	126	95	115
West Calder (Addiewell)	125	106	116	Alness (Ardoss Castle)	87	119	101
Edinburgh (Univ. Engin. Lab.)	110	122	116	Ullapool	94	104	98
Kilmarnock (Agricultural Coll.)	132	102	119	Loch Torridon (Bendamph)	113	86	102

‡ For Counties see Table XXI, pp. 113–117.

Table XXII.—*Seasonal Rainfall, 1929–1930, in relation to the Average, 1881–1915—(con.).*

Station.‡	Winter 6 Months, Oct. 1929–Mar. 1930. Per cent. of Average.	Summer 6 Months, Apl. 1930–Sept. 1930. Per cent. of Average.	Twelve Months, Oct. 1929–Sept. 1930. Per cent. of Average.
Stornoway	102	85	96
Lairg	101	106	103
Tongue	102	103	102
Loch More (Achfary)	115	103	110
Wick	111	128	119
Pomona (Deerness)	104	120	110
Dunmanway (The Rectory)	143	96	125
Glanmire (Lota Lodge) No. 1	144	114	132
Mallow (Longueville)	155	124	143
Cahirciveen (Valentia Observatory)	141	117	131
Gap of Dunloe (Gearhameen)	136	103	124
Waterford (Brook Lodge)	142	101	124
Nenagh (Castle Lough)	150	108	132
Cahir (Abbey)	135	113	125
Foynes (Coolnanes)	148	103	128
Gorey (Courtown House)	165	128	148
Kilkenny Castle	138	121	130
Bagnalstown (Fenagh Ho.)	160	122	142
Abbey Leix (Blandsfort)	149	122	136
Birr Castle	141	114	128
Straffan House	135	136	135
Balbriggan (Ardgillan) No. 1	149	129	139
Kells (Headfort)	128	114	121
Mullingar (Belvedere)	128	114	121
Greenore	114	93	104
Castle Forbes Gardens	132	98	116
Ballynahinch Castle	122	131	126
Ahascragh (Clonbrock)	121	106	114
Blacksod Point	128	121	125
Westport House	136	105	123
Delphi Lodge	118	114	116
Collooney (Markree Observatory)	118	122	120
Belturbet (Cloverhill)	122	106	114
Armagh Observatory	139	104	122
Seaforde	132	114	124
Belfast (Queen's University)	130	116	123
Ballymena (Harryville)	123	112	118
Londonderry (Creggan Reservoir)	119	113	116
Limavady (Drenagh)	117	95	107
Omagh (Edenfel)	124	106	116
Milford (The Manse)	110	110	110
General Values* **England**	**144**	**129**	**138**
Wales	**154**	**117**	**139**
England and Wales	**146**	**127**	**138**
Scotland	**115**	**112**	**114**
Ireland	**134**	**113**	**125**
British Isles†	**134**	**119**	**128**

* Obtained by taking the means of the percentage values for the stations. † Including Isle of Man. ‡ For Counties see Table XXI, pp. 113–117.

10. THE TOTAL FALL OF RAIN IN 1930 AND ITS RELATION TO THE AVERAGE.

The total rainfall for the year is given for over 5,000 stations in the British Isles in the General Table, Part III of this volume. As many of these totals as practicable have been plotted on a map on the scale of 19 miles to the inch. In the districts of relatively few rainfall stations, each record has been plotted, while in the more thickly represented areas some have had to be omitted. Isohyetal lines, or lines of equal rainfall amount, have been drawn giving a cartographical presentation of the distribution of the rainfall of the year over the land. The map is reproduced on a smaller scale as the folding plate opposite this page. Such a map is dominated by the orography of the country to such an extent that not only is it complicated in itself, but it also closely resembles its predecessors, the differences being noticeable only after detailed examination and comparison. The characteristics of a particular year are brought out better by a map such as that opposite p. 130, in which the percentage ratio of the rainfall for the year to the average is shown. It has been coloured so that blue areas represent regions where the fall in 1930 was more than the average, and red areas represent regions where the fall in 1930 was less than the average. The statistics on which the latter map is based are set out in Tables XXI and XXIV.

The percentage map for 1930 shows by means of continuous lines the places where the values of the rainfall were, respectively, 100, 110, 120, 130, 140 and 150 per cent. of the average values.

The total rainfall was less than the average over only a small part of the British Isles. Small deficiencies occurred in the Thames Valley, between Newbury and Windsor, near Bournemouth, Melrose, Perth, Grantown-on-Spey, the Caledonian Canal, along the north-west coast of Scotland and near Lough Foyle. The deficiency does not appear to have reached 10 per cent. in any part of the British Isles. Some of the smallest percentage values given in Tables XXI and XXIV are :—91 at Loch Torridon (Bendamph) in Ross-shire, 92 at Stornoway, 93 at Limavady near Lough Foyle, 95 at Sherborne St. John near Basingstoke.

The rainfall over the greater part of Scotland was within 10 per cent. of the average. Only small areas recorded more than 120 per cent. and these were confined to the neighbourhood of Ellon in eastern Aberdeenshire, Dundee, Glasgow, Rothesay and part of northern Dumfries-shire.

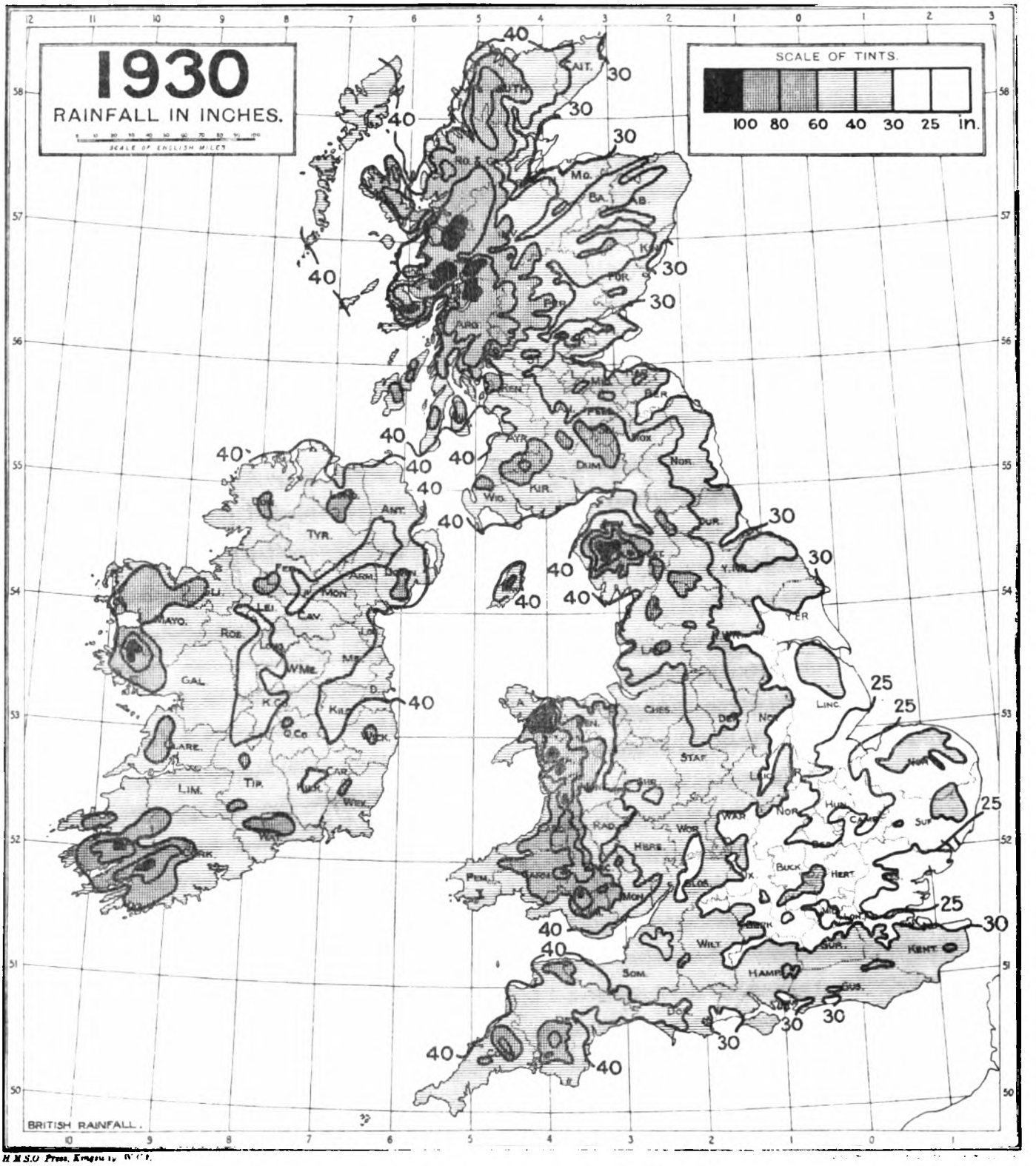
The greater part of Ireland recorded more than 110 per cent. of the average. Falls of more than 120 per cent. occurred over a large area in the south-east, while there was more than 130 per cent. along the east coast from the north of Dublin to Wexford. The rainfall at Dublin (Phœnix Park) was 38·66 inches and 11·02 inches or 40 per cent. in excess of the average. The total excess in the three months January, August and September was 8·44 inches, the excesses in the individual months being 1·77 inches, 1·85 inches, and 4·82 inches respectively. September 1930 was in Dublin the wettest September on record.

The annual totals were most striking in England and Wales, where large areas recorded more than 130 per cent., especially over the broad belt stretching from Bala and Worcester in the south-west to Scarborough and Sunderland in the north-east. As much as 130 per cent. was also recorded in small areas near Woodbridge (Suffolk), at Hastings, Ashburton on Dartmoor and at Llanelly. At Rendlesham Hall, in east Suffolk, the annual total was 30·27 inches and 7·13 inches or 31 per cent. in excess of the average. The excess in September was 4·40 inches, as much as 3·30 inches occurring in thunderstorm rains on the 27th and 28th. More than 140 per cent. occurred to the south of Stafford and over the north Yorkshire Moors, while rather more than 150 per cent. occurred to the west of Whitby, due mainly to the heavy rains of July 20th to 23rd, when 11·97 inches was recorded at Castleton. In the case of the stations which recorded more than 6 inches on these four days, the annual rainfall is given below both in actual inches and as a percentage of the average annual rainfall. The rainfall of July 20th to 23rd is also given, the values being taken from Section 7.

Rainfall 1930 *in the North Yorkshire Wolds.*

Station.	July 20–23	1930	
		in.	% of average
	in.		
Egton Bridge (Bridgeholme).....	9·78	51·93	156
Danby Lodge	11·73	54·74	154
Glaisdale (The Gables).....	8·33	54·71	154
Danby School.....	11·04	52·45	149
Castleton	11·97	51·92	146
Sleights (The Hall).....	8·31	43·74	143
Ingleby Manor	8·57	47·53	141
Aislaby (Park Hall)	8·48	43·00	140
Kildale Hall.....	11·04	49·04	138

Falls of 150 per cent. and more are by no means uncommon,



H.M.S.O. Press, Kingsway, W.C.1.

[Face page 128.]

although there are many years in which no part of the country recorded so large a percentage. The rainfall in the North Yorkshire Wolds in 1930 was not as great as that of 1872 when Whitby recorded 38·62 inches or 154 per cent. of the average and Osmotherly 180 per cent. of the average.

The type of rainfall distribution shown on the rainfall map is associated with the cyclonic conditions which predominated during most months of the year. February was the only conspicuously dry month and there were only four months, *viz.*, February, May, June and December in which the general precipitation over the British Isles was below the average (see Section 8).

Use is made of the percentage values at the 271 stations of both Tables XXI and XXIV to derive general values of the total rainfall for the year over the British Isles and over the larger divisions separately. These values are set out in the following table :—

TABLE XXIII.—*General Rainfall,* 1930, *compared with average.*

Countries.	No. of Stations.	Average 35 years 1881-1915.	1930	
			Per cent.	Rainfall.
		in.		in.
England	136	32·67	117	38·2
Wales.....	24	50·14	120	60·0
England and Wales.....	160	35·23	117	41·4
Scotland	62	50·32	109	54·6
Ireland	48	43·20	116	50·4
British Isles†	271	41·41	115	47·7

† Including Isle of Man.

For the British Isles as a whole, the rainfall of 1930, was 15 per cent. in excess of the average. During the sixty-three years from 1868 the rainfall of 1930 has been exceeded on only eight occasions, *viz.*, 1872, 1877, 1882, 1903, 1912, 1924, 1927 and 1928. On the average of the whole period a wetter year than 1930 occurs, therefore, once in about eight years. It is all the more striking, therefore, to find that three of the last seven years have been wetter than 1930.

The rainfall over the British Isles as a whole has reached or exceeded the average for the period 1881 to 1915 in each of the last nine years. The accumulated excess has amounted to 90 per cent. of the average annual amount. In the last nine years we have received, therefore, nearly as much rain as falls on the average in 10 years. So long a run of wet years has not occurred since the nine

years 1875 to 1883. The accumulated excess during this period was slightly less than that just recorded, being 82 per cent.

Table XXIII shows that the excess was greatest over Wales (20 per cent.), and least over Scotland (9 per cent.). The excesses in England and Ireland were 17 and 16 per cent., respectively. The years 1924 and 1927 were wetter than 1930 over England and Wales as a whole; the years 1926, 1927 and 1928 were wetter than 1930 over Scotland; the years 1924 and 1928 were wetter than 1930 over Ireland.

The general distribution of the actual rainfall, as shown on the folding plate, is similar to that for other years. The total for the year was less than 25 inches in the neighbourhood of the Thames Estuary, in the east of Essex and over a large area stretching from the Wash to Bedford. More than 100 inches was recorded in the English Lake District, over Snowdonia and the mountains of central Wales, in parts of Argyllshire and Inverness-shire, including Ben Nevis, Ben Alder and Ben More on Mull, as well as in small areas in the mountains of Connemara and Kerry.

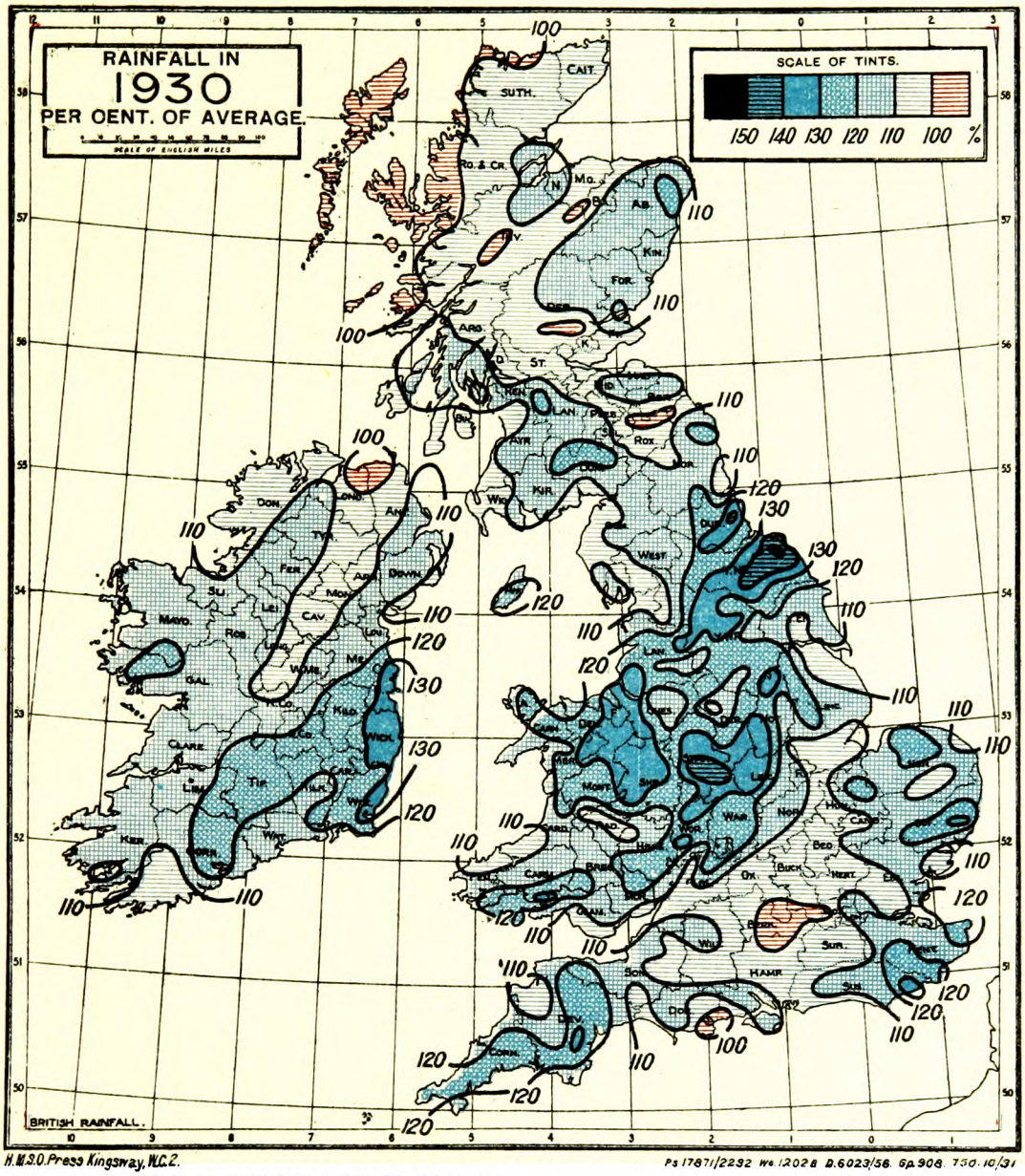
Among the largest totals reported for the year and set out in the General Table, Part III, the following may be mentioned :—

		Inches.
England ..	Cumberland, Borrowdale (The Stye) ..	167·89
Wales ..	Carnarvon, Snowdon (Crib Goch) ..	189·70
	,, ,, (Delta)	187·70
Scotland ..	Inverness, Loch Quoich (Loan)	133·74
	Argyll, Mull (Benmore)	132·50
	Inverness, Loch Quoich (Kinlochquoich)	118·04
Ireland ..	Kerry, Kilgarvan (Inchimore)	115·69
	Mayo, Delphi Lodge	109·54

Some of the smallest totals for the year are set out below :—

		Inches
England ..	Essex, Horndon (Eastern Sewage Works)	20·64
	,, Southminster (The New Moor) ..	21·01
	,, Shoeburyness (New Ranges) ..	21·51
Scotland ..	Moray, Duffus (Hopeman Lodge).. ..	24·48

RELATION OF RAINFALL IN 1930 TO THE AVERAGE OF 1881-1915.



H.M.S.O. Press Kingsway, W.C.2. Ps 17871/2232 We 12028 D.6023/56. Gp.908. 750. 10/31

AIR MINISTRY, METEOROLOGICAL OFFICE.

The area coloured Red had rainfall below the average, that coloured Blue had rainfall above the average.

TABLE.—XXIV.—*Rainfall of* 1930 *as Percentage of Average,* 1881-1915.*

County.	Station.	Per cent. of Aver-age.	County.	Station.	Per cent. of Aver-age.
	ENGLAND.		Yorks W.R.	Wakefield (Clarence Park)	126
Surrey	Reigate (Wray Park Rd.)	108	,,	Skipton (Chelker Res.)	134
Kent	Folkestone (Cherry Gardens)	119	,, E.R.	Spurn Head	107
,,	Rochester (Knights Place)	111	,,	Patrington	110
Sussex	Patching Farm	112	,,	Lowthorpe (The Elms)	116
,,	Horsham (Wimblehurst)	109	,, N.R.	Pickering (Hungate Hall)	123
,,	St. Leonards (Gensing Gardens)	131	,,	Guisborough (Lockwood Res.)	147
Hampshire	Totland Bay (Aston House)	109	Durham	Barnard Castle (County Schl.)	136
,,	Portsmouth (Victoria Park)	109	,,	Ushaw (St Cuthbert's College)	125
,,	Grayshott	108	North'ld	Morpeth (Cockle Park)	111
Berkshire	Wellington College	100	,,	Howick Hall	120
,,	Newbury (Greenham Common)	99	Cumberl'd	Penrith (Briar Cottage)	115
Hertford	Harpenden (Rothamsted)	103	,,	Mealsgate (Quarry Hill)	109
Oxford	Leafield (Wireless Station)	108	,,	Ravenglass (The Grove)	110
N'hants	Wellingborough (Swanspool)	108	Westmorl'd	Kirkby Stephen (Eden Place)	112
,,	Oundle (Milton Road)	102	,,	Grasmere (The Wray)	106
Bedford	Woburn (Crawley Mill)	101		**WALES.**	
Cambridge	Cambridge (Botanic Gardens)	109	Monmouth	Tredegar	114
Essex	Elsenham (Gaunts End)	111	Glamorgan	Gorseinon (Penllergaer)	117
,,	Shoeburyness (New Ranges)	114	Carmarth'n	Llanwrda (Dolaucothy)	114
,,	Bradwell-on-Sea	111	Pembroke	Pembroke (Stackpole Court)	129
Suffolk	Felixstowe Aerodrome	102	,,	St. Ann's Head	119
,,	Bury St. Edmunds (Westley Ho.)	112	,,	Fishguard (Langton, Dwrbach)	104
Norfolk	Cromer	114	Montgom'y	Newtown (Penarth Weir)	123
,,	Wells (Holkham Hall)	128	Denbigh	Wrexham (Pack Saddle Res.)	135
Wiltshire	Landford (Northlands)	110	,,	Denbigh (Garn)	123
,,	Marlborough College	105	Merioneth	Corwen (Rug Gardens)	134
Dorset	Bere Regis (Bloxworth House)	105	Anglesey	Llanerchymedd (Llwydiarth Esgob)	122
,,	Beaminster (Hamilton Lodge)	120		**SCOTLAND.**	
Devon S.	Plymouth (The Hoe)	121	Dumfries	Langholm (Ewes)	114
,,	Sidmouth (Sidmount)	117	Roxburgh	Kelso (Springwood Park)	99
,, N.	Okehampton (Uplands)	117	Midlothian	Moorfoot Hills (Gladhouse R.)	108
,,	Torrington (Enfield)	105	Ayr	Maybole (Culzean Castle Gdns.)	117
Cornwall	Newquay (Mount Wise)	120	Renfrew	Paisley W.W. (Backthornley-muir.)	113
,,	Falmouth Observatory	114	,,	Glasgow (Queen's Park)	121
,,	Tresco Abbey	123	Argyll	Corran Lighthouse	108
Somerset	Chew Magna	107	,,	Mull of Kintyre	110
,,	Batheaston Reservoir	117	,,	Lock Eck (Benmore)	114
,,	Somerton (Butleigh Court)	101	,,	Lismore (Mousedale)	110
,,	Milverton (Spring Grove)	117	Perth	Glengyle	102
Gloucester	Cheltenham (Montpellier Gns.)	128	,,	Perth (Wellshill Cemetery)	100
Hereford	Hereford (Belmont Abbey)	128	Angus	Kirriemuir (Lintrathen)	118
,,	Leominster (Fairholme)	114	Aberdeen	Ellon (Esslemont House)	128
Shropshire	Shifnal (Hatton Grange)	126	Banff	Keith Station	113
Stafford	Leek (Wall Grange)	125	Inverness	Dalwhinnie (Drumochter Lo.)	109
Worcester	Bromsgrove (Tardebigge Res.)	129	,,	Loch Ness (Foyers)	113
,,	Stourport (Lincombe Lock)	135	Ross	Strathpeffer	109
Warwick	Ryton-on-Dunsmore (Ryton Ho.)	122		**IRELAND.**	
Leicester	Kibworth Beauchamp	119	Cork	Cork (University College)	120
,,	Thornton Reservoir	136	,,	Roches Point	126
Lincoln	Spalding (Pode Hole)	106	Kerry	Darrynane Abbey	122
,,	Skegness	111	Wexford	Foulkesmill (Longraigue)	130
,,	Louth (Westgate)	109	Carlow	Carlow (Browne's Hill)	120
Nottingh'm	Nottingham (Strelley)	132	,,	Hacketstown Rectory	135
,,	Worksop (Hodsock Priory)	135	Dublin	Dublin (Phœnix Park)	140
Derby	Buxton (Devonshire Hosp.)	109	W'meath	Athlone (Twyford House)	105
Cheshire	Runcorn (Weston Point)	120	Roscomm'n	Strokestown (Castlenode)	118
,,	Woodhead Reservoir	124	Mayo	Aasleagh House	123
Lancs. C.	Burnley (Swindon) *Lower g.*	131	Armagh	Lurgan (Belle Vue)	113
,,	Wigan W.W. (Worthington)	125	Down	Newry (Bridge Street House)	114
,,	Blackpool (Met. Observatory)	119	,,	Donaghadee (Coastguard Stn.)	112
,,	Garstang (Grisedale Res.)	117			
,,	Slaidburn (Dunsop Houses)	106			
Yorks W.R.	Goole	121			
,,					

*See also Table XXI, pp. 113-117.

II.—EVAPORATION AND PERCOLATION IN 1930.

The *evaporation gauges* in use are square tanks sunk in the ground, and the evaporation which is measured is that from a free water surface. The standard gauge at Camden Square is 6 ft. square and 2 ft. deep, and is sunk so that the lip projects about 3 inches. The routine consists of the daily measurement of the level of the water below a mark fixed in the tank. From the difference between consecutive daily measurements, is deducted the rainfall for the same period, as measured in an adjacent rain-gauge. The net depression of the water-level in the tank during the interval of 24 hours is taken to be a measure of the evaporation. Sometimes in winter the "evaporation" comes out as a small negative quantity; this is regarded as due to the condensation of water from the superincumbent air, and the corresponding measurements are marked "c" in the tables. So far as is practicable, the level of the water is kept about 2 to 3 inches below the top of the lip. This necessitates water being added in summer and syphoned off in winter. During the winter months there is some difficulty in getting a reading when the water freezes. In such cases the ice is broken away from the side of the tank and the measurement of the water-level is made while the ice is floating. If this cannot be done any morning, owing to the thickness of the ice, a measurement is made as soon as possible (on a subsequent morning), and the amount of evaporation calculated over the whole period. The evaporation is small in winter, so that little information is lost by adopting this procedure.

The accuracy of the measurements of evaporation depends on the depth of water caught as rain in the evaporation tank being identical with that measured directly in the rain-gauge alongside. Some of the factors which are likely to vitiate the measurements of evaporation were discussed in *British Rainfall*, 1925, pp. 127–128.

The list of stations given in Table XXV, for which details of the evaporation are available for 1930, is the same as last year, apart from the inclusion of a record at Glencorse Filters instead of that at Revesby Reservoir, which has stopped temporarily. Glencorse Filters are situated to the east of the Pentland Hills, some six miles to the south-south-west of Edinburgh Castle. The tank is situated below Glencorse Reservoir, near the bottom of a valley running north to south and with hills rising to over 1,500 ft. to the north and south-west. The position of the rain-gauge alongside was

considered to be satisfactory when inspected in 1929. The evaporation tank below the dam at Talla Water, near St. Mary's Loch, is in a wetter and more mountainous district, the hills within four miles to the west and east rising to well over 2,000 feet. It is noteworthy that the three evaporation tanks in Scotland, although situated in such different types of country, give comparable records.

Four evaporation tanks were maintained during the year by the Engineer, Cardiff Water Works, at Llanishen Reservoir, near Cardiff, and at three stations in the Upper Taff Valley, some 25 to 30 miles to the north-west. These are at Llwynon, Cantref Reservoir and Beacons Reservoir. The tanks are near the main river at altitudes of 860, 1,080 and 1,340 feet respectively, and the two extreme stations are only five miles apart. The annual totals were 24·92, 17·79, 10·04 and 10·62 inches, and in view of the wide variation, the monthly totals are not included in Table XXV, pending further investigation. As already pointed out the reliability of the evaporation record depends on the tank and rain-gauge catching similar samples of the precipitation. At Llanishen Reservoir the evaporation tank is at the top of a bank, in order to be as near the reservoir as possible. It is probable that the large figures for the evaporation are due to the gauge catching more rain than the tank, and possibly also to water being blown out of the tank. At both Cantref and Beacons the evaporation tanks give more " precipitation " during the winter months, than the adjacent standard gauges, which were considered to be reasonably well exposed on inspection, in 1924. The daily values at Cantref were examined in detail and these indicate that on days of heavy rain the tank invariably recorded more rain than the standard gauge, suggesting that there was insplashing into the tank. In this connection it should be mentioned that the rim of the tank is only three inches above the level of the ground. The Engineer-in-Charge has, however, examined the tank, but does not consider that any appreciable insplashing takes place, the tank being surrounded by grass, which is kept short.

In *British Rainfall*, 1923, and 1924, details are given of the evaporation recorded at Valentia Observatory, Co. Kerry, on days with not more than ·04 inch of rain. The measurements on days with a larger amount of rain were omitted, because it had been noted that during heavy rain the net gain of water in the evaporation tank was in excess of the rainfall. This was due to water splashing into the tank from the ground on the windward side exceeding that which splashed out on the leeward side. It was also noted that during strong winds the recorded evaporation was often large, suggesting that some water was blown out of the tank. A turf wall was consequently erected round the tank. It was circular, about 5 feet away from the walls of the tank and the top was about 6 inches above the

level of the rim. The monthly totals of evaporation, July to December, were :—2·89, 1·39, 1·99, ·53, ·40 and ·09 inches. Although the tank is now somewhat sheltered, so that it is not exposed to the normal wind at the surface in its locality, the monthly totals seem more reasonable than previously.

The evaporation from a free water surface at each station shows a well-marked seasonal variation. The amount is large in the six summer months, April to September, and much smaller in the remaining months of the year. During 1930, most stations recorded less evaporation than usual, this being associated with the deficiency of sunshine, which was experienced in most parts of the country. The mean deficiency of sunshine during the year over the country as a whole was 5 per cent. One of the few pleasant features of an otherwise disappointing summer was the brilliant weather of Whitsuntide, when 13 hours or more of bright sunshine occurred daily in the east and south-east of England. Most of the evaporation records showed unusually large values during this period. At Camden Square (London) the total evaporation during the period June 5th to 9th amounted to ·75 inch, the largest amount recorded in five consecutive days during the year.

The monthly and annual means for the twelve stations are set out in the last column of the table. For the year the mean evaporation is 15·3 inches. This is smaller than the corresponding values for recent years, although the mean evaporation was 15·5 inches in 1927 and 15·4 inches in 1924. As much as 12·9 inches or 85 per cent. of the total was evaporated in the six summer months. There is a fairly uniform change from a maximum in June and July to a minimum in December and January. The evaporation was greatest in June at every station except one, at which the largest amount occurred in July. In most parts of the country June was the only summer month with an excess of sunshine.

The monthly evaporation values for the 46 years, 1885 to 1930, at Camden Square (London) are set out in Table XXVII. For 1930 the evaporation of 14·31 inches was 1·19 inches less than the average for the 35 years (1885–1919). The total evaporation was 2·60 inches less than that recorded in 1929, although appreciably more than in either 1926 or 1927. The evaporation was less than the average in each of the summer six months except June, and in excess of the average in each of the winter months except December. This is in general accord with the sunshine records received from most parts of the country.

In Table XXVI the amount of water which percolates through a definite depth of soil is given. The stations in operation during 1930 are the same as in 1929 apart from Grayshott, where the record

has terminated. Details of the percolation gauges and the type of soil are set out in the footnotes and in *British Rainfall*, 1924, p. 128. The difference between percolation and rainfall is largely to be accounted for by evaporation, but evaporation as determined in this way (known as " calculated evaporation ") is not strictly comparable with that given in the earlier table. There is no free water surface present in the percolation gauge, but during dry periods the surface soil is nearly dry, so that practically no evaporation can take place.

At Compton, no rain percolated through the gauge (which consists of 10 inches of soil, on which grass is grown, over 2 feet of well-rammed chalk) from the 23rd May to the 17th October (inclusive), while at Craibstone the percolation for the three months May to July only amounted to a tenth of an inch. The main feature of the records is that, apart from Compton, an appreciable amount of rain percolated through the gauges as early as August.

The percolation gauges at Rothamsted and Craibstone require special comment. At Rothamsted, practically the same quantity of rain which passes through the 20-inch gauge is recorded in the 60-inch gauge. This is in accord with the records of earlier years. It is reasonable to conclude therefore that the 20-inch gauge at Rothamsted is of sufficient depth to give a good indication of the water likely to go into " permanent storage."

Table XXV.—*Evaporation in* 1930.

List of Stations.	County.	Observer.	Particulars of Tank. Height above Ground.	Height above Sea Level.	Side.	Capacity.
			ft. in.	ft.	ft. in.	Gals.
Camden Square.	London 2	Royal Meteor. Soc. ..	0 3	111	6 0	450
Otterbourne ..	Hampshire 5	E. C. Rodda, Esq. ..	0 3	112	6 0	450
Petersfield	,, ...6	C. J. P. Cave, Esq. ..	0 3	747	4 0	250
Ormesby St. M..	Norfolk 2	Gt. Yarmouth W.W.	0 3	21	6 0	450
Kennick	South Devon 5	S. C. Chapman, Esq.	0 3	835	6 0	450
Southport	Cen. Lancashire...3	J. Baxendell, Esq. ..	0 3	37	3 0	112
Ardsley, No. 1	Yorkshire, W.R. 8	C. C. Smith, Esq. ..	0 3	395	6 0	450
,, No. 2	,, ,, 8	,, ..	0 3	326	6 0	450
Lower Laithe ..	,, ,, 9	M. R. Barnett, Esq...	0 6	772	6 0	450
Harrogate	,, ,, 11	A. S. West, Esq.	0 3	589	6 0	450
Talla Water ..	Peebles 1	Messrs. Leslie & Reid	0 3	904	6 0	450
Glencorse Filters	Midlothian 4	,, ,,	0 3	639	6 0	450
Edinburgh	,, ...5	Sir T. Hudson Beare	0 3	227	4 0	200

1930.	Camden Square.	Otterbourne.	Petersfield.	Ormesby St. Michael.	Kennick.	Southport.	Ardsley No. 1.
	in.	in.	in.	in.	in.	in.	in.
January	·13	·07	·13	·20	c ·19	·07	·23
February	·26	·48	·32	·35	·38	·11	·33
March	·90	·84	·70	·84	·89	·73	·85
April	1·07	1·57	1·39	1·39	2·19	1·36	1·28
May.....	1·82	2·22	1·71	1·69	2·26	2·46	2·49
June	3·07	3·85	3·25	2·75	3·67	3·13	2·96
July	2·85	3·54	3·00	2·50	3·51	2·93	2·90
August	1·98	2·81	2·54	1·76	2·78	2·32	2·67
September	1·16	1·64	1·57	1·35	1·73	1·31	1·48
October	·71	1·03	·86	·88	·71	1·02	1·10
November	·28	·46	·29	·48	·77	·47	·43
December	·08	·21	·03	·10	·20	·09	·02
Year	14·31	18·72	15·79	14·29	18·90	16·00	16·74
Average, 1908–1930 ..	15·19	19·57	..	..	18·84	..	17·34
Difference	−·88	−·85	..	..	+·06	..	−·60

1930.	Ardsley No. 2.	Lower Laithe.	Harrogate.	Talla Water.	Glencorse.	Edinburgh.	Mean of 13 Records.
	in.	in.	in.	in.	in.	in.	in.
January	·07	c ·27	·66	·02	·00	·06	·09
February	·27	·05	·29	·08	·15	·20	·25
March	·77	·39	1·04	·27	·30	·52	·70
April	1·15	·65	1·33	1·49	1·08	1·18	1·32
May.....	2·09	2·07	2·49	2·40	1·89	2·19	2·14
June	2·59	2·47	2·97	3·36	2·96	2·88	3·07
July	2·49	2·23	3·22	2·32	2·03	2·09	2·74
August	2·32	2·21	2·85	1·76	1·89	1·82	2·28
September	1·32	1·10	1·49	1·12	·99	1·61	1·37
October	·79	1·08	1·30	·38	·70	·57	·86
November	·32	·24	·87	·00	·15	·10	·37
December	c ·01	c ·11	·27	·04	·07	·04	·08
Year	14·17	12·11	18·78	13·24	12·21	13·26	15·27
Average, 1908–1930 ..	..	..	19·17	15·71	..	..	..
Difference	..	..	−·39	−2·47	..	..	..

NOTE.—In the Table, " c " indicates an excess of condensation over evaporation.

Table XXVI.—*Rainfall, Percolation and Calculated Evaporation in* 1930.

(Unless otherwise stated the size of the percolation gauges is 3 ft. × 3 ft. × 3 ft.)

1930.	Compton, Sussex.		¶ Rothamsted, Herts.			
	Rainfall.	Percolation.	Rainfall.	Percolation ** 20 in. Soil.	Percolation ** 40 in. Soil.	Percolation ** 60 in. Soil.
	in.	in.	in.	in.	in.	in.
January	5·58	5·42	3·06	3·02	3·08	2·91
February	1·38	1·41	·76	·61	·74	·70
March	1·60	·89	1·38	·71	·75	·71
April	2·53	1·40	2·17	·86	·96	·89
May	2·23	·16	2·77	·53	·59	·56
June	·57	·00	·93	·12	·15	·14
July	2·80	·00	2·16	·23	·18	·21
August	4·17	·00	2·59	·62	·67	·65
September	2·88	·00	3·23	1·69	1·71	1·67
October	2·48	·63	1·05	·19	·22	·21
November	6·64	6·32	4·76	4·35	4·48	4·34
December	4·87	4·02	2·62	2·54	2·68	2·62
Year	37·73	20·25	27·48	15·47	16·21	15·61
Calculated Evaporation	..	17·48	..	12·01	11·27	11·87

1930.	Harrogate, Yorks.		Craibstone, Aberdeen.			
	Rainfall.	Percolation.	Rainfall.	Percolation. § 1* 40 in. Soil.	Percolation. § 2† 40 in. Soil.	Percolation. § 3‡ 40 in. Soil.
	in.	in.	in.	in.	in.	in.
January	5·12	5·10	2·07	1·61	1·45	1·51
February	·78	1·02	1·57	1·35	1·17	1·18
March	2·31	1·58	1·09	·88	·72	·84
April	2·83	1·37	3·44	1·89	1·74	1·83
May	1·58	·41	1·27	·13	·12	·10
June	1·74	·05	2·19	·00	·01	·00
July	5·09	1·33	1·50	·00	·00	·00
August	3·73	1·68	6·67	1·27	1·58	1·61
September	4·28	2·42	6·23	4·90	4·86	4·93
October	2·48	1·68	3·43	2·03	2·04	2·24
November	4·54	4·23	3·95	3·87	3·85	3·90
December	2·59	2·82	5·11	4·78	4·61	4·57
Year	37·07	23·69	38·52	22·71	22·15	22·71
Calculated Evaporation	..	13·38	..	15·81	16·37	15·81

¶ Area of gauges one thousandth of an acre.
§ The gauges were under pasture.
† Manured.
** Through bare unworked soil.
* Unmanured.
‡ Manured and limed.

Table XXVII.—*Evaporation at Camden Square, London,* 1885–1930.

	Jan. in.	Feb. in.	Mar. in.	April in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Total. in.
1885.....	·20	·38	·86	1·71	1·98	2·77	3·29	2·25	1·13	·77	·17	·11	15·62
1886.....	·23	·13	·53	1·59	1·78	2·93	3·12	1·86	1·46	·63	·27	·12	14·65
1887.....	c·07	·29	·76	1·72	1·79	3·68	3·76	2·54	1·25	·78	·21	·07	16·78
1888.....	·07	·37	·48	1·16	2·71	2·24	1·44	1·90	1·17	·60	·43	·03	12·60
1889.....	·03	·18	·62	1·07	1·76	2·97	2·34	1·96	1·52	·42	·29	c·13	13·03
1890.....	·08	·19	·50	1·44	2·63	2·14	2·33	2·02	1·27	·79	·31	·04	13·74
1891.....	·03	·16	·73	1·35	1·66	2·83	2·34	1·67	1·00	·62	·20	·22	12·81
1892.....	·05	·09	·60	1·88	2·65	3·05	2·84	2·20	1·01	·36	·02	·20	14·95
1893.....	c·03	·01	·92	2·33	3·06	3·62	3·12	2·85	1·48	·70	·11	·01	18·18
1894.....	c·04	·28	·83	1·17	2·10	2·48	2·49	1·91	·97	·37	·20	·11	12·87
1895.....	·14	·64	·36	1·26	3·06	3·31	3·07	2·12	1·27	·54	·19	·07	16·03
1896.....	·16	·24	·64	1·57	3·06	3·21	3·63	1·96	·68	·47	·18	·00	15·80
1897.....	·23	·21	·76	1·23	2·99	2·48	3·60	2·49	·99	·63	·26	c·14	15·73
1898.....	·19	·37	·51	1·28	1·56	2·10	2·96	2·53	1·73	·45	·11	·16	13·95
1899.....	·04	·28	·52	1·24	2·34	3·67	4·03	3·78	2·01	·45	·41	·11	18·88
1900.....	·03	·16	·80	1·46	2·35	2·85	4·25	2·61	1·61	·89	·24	·15	17·40
1901.....	·13	·24	·60	1·98	3·25	3·85	3·37	3·19	1·42	·64	·31	c·05	18·93
1902.....	·16	·15	·71	1·75	1·78	2·33	3·30	1·71	1·47	·69	·28	·27	14·60
1903.....	·26	·39	·97	1·57	2·24	2·79	3·35	2·53	1·51	·86	·29	·12	16·88
1904.....	c·09	·26	·54	1·68	1·81	3·32	4·06	2·86	1·20	·50	·26	·02	16·42
1905.....	·17	·35	·65	1·14	3·19	2·49	3·65	2·23	1·24	·78	·09	·16	16·14
1906.....	·06	·21	·73	1·90	1·90	3·53	3·65	3·46	2·38	·78	·27	·16	19·03
1907.....	·21	·38	1·02	1·27	1·93	2·47	2·65	2·24	1·72	·49	·27	·19	14·84
1908.....	·05	·27	·56	1·32	2·23	3·77	2·75	2·47	1·25	·48	·29	·14	15·58
1909.....	·14	·30	·30	1·85	2·93	1·70	2·60	2·23	·84	·76	·17	·16	13·98
1910.....	·22	·17	·80	1·43	2·52	2·57	2·00	2·12	1·42	·76	·19	·10	14·30
1911.....	·15	·32	·59	1·77	2·58	3·34	4·60	3·19	1·96	·64	·37	·02	19·53
1912.....	·24	·16	·79	2·34	2·44	2·49	2·55	1·69	1·41	·39	·33	·12	14·95
1913.....	·10	·32	·77	1·25	2·49	3·13	2·15	2·09	1·07	·61	·36	·32	14·66
1914.....	·09	·24	·52	1·84	2·56	2·93	2·72	1·99	1·68	·70	·28	·05	15·60
1915.....	·11	·13	·66	1·65	2·90	3·15	2·50	1·76	1·61	·56	·25	c·03	15·25
1916.....	·19	·34	·30	1·61	2·32	2·20	2·23	2·34	1·20	·76	·34	c·04	13·79
1917.....	·11	·17	·53	1·18	3·06	3·01	2·81	1·95	1·16	·75	·34	·12	15·19
1918.....	·14	·27	·85	·89	2·38	3·01	2·59	2·04	1·69	·40	·24	·16	14·66
1919.....	c·12	·13	·66	1·06	2·94	3·39	1·90	2·78	1·53	·61	·08	·06	15·02
1920.....	·20	·24	·78	·85	2·71	2·85	2·09	2·00	1·04	·66	·04	·00	13·46
1921.....	·20	·28	·96	1·91	3·04	3·66	4·17	2·56	1·72	·72	·19	·28	19·69
1922.....	·16	·31	·96	1·20	2·93	3·36	2·09	1·74	1·11	·66	·27	·14	14·93
1923.....	c·01	·16	·65	1·26	2·16	2·16	3·59	2·79	1·24	·73	·24	·02	14·99
1924.....	c·17	·28	·73	1·28	2·27	2·91	3·21	1·82	1·11	·59	·33	·11	14·47
1925.....	·12	·30	·83	1·30	2·34	3·48	2·61	1·58	1·01	·56	·37	·00	14·50
1926.....	c·03	·12	1·03	1·06	2·07	2·50	2·51	2·12	1·34	·74	·20	·05	13·71
1927.....	·05	·19	·65	1·45	2·91	2·64	2·01	1·75	1·08	·37	·29	·13	13·52
1928.....	c·04	·23	·70	1·33	2·15	3·04	4·08	2·17	1·67	·57	·36	·03	16·29
1929.....	·20	·29	·64	1·53	2·66	2·93	3·42	2·22	1·81	·80	·27	·14	16·91
1930.....	·13	·26	·90	1·07	1·82	3·07	2·85	1·98	1·16	·71	·28	·08	14·31
Average 1885–1919...	·10	·25	·66	1·51	2·43	2·91	2·97	2·33	1·38	·62	·25	·09	15·50
Difference 1930	+·03	+·01	+·24	−·44	−·61	+·16	−·12	−·35	−·22	+·09	+·03	−·01	−1·19

NOTE.—c indicates condensation.

BRITISH RAINFALL, 1930

PART III

FOR OFFICIAL USE

METEOROLOGICAL OFFICE, AIR MINISTRY

BRITISH RAINFALL ORGANIZATION

BRITISH RAINFALL, 1930

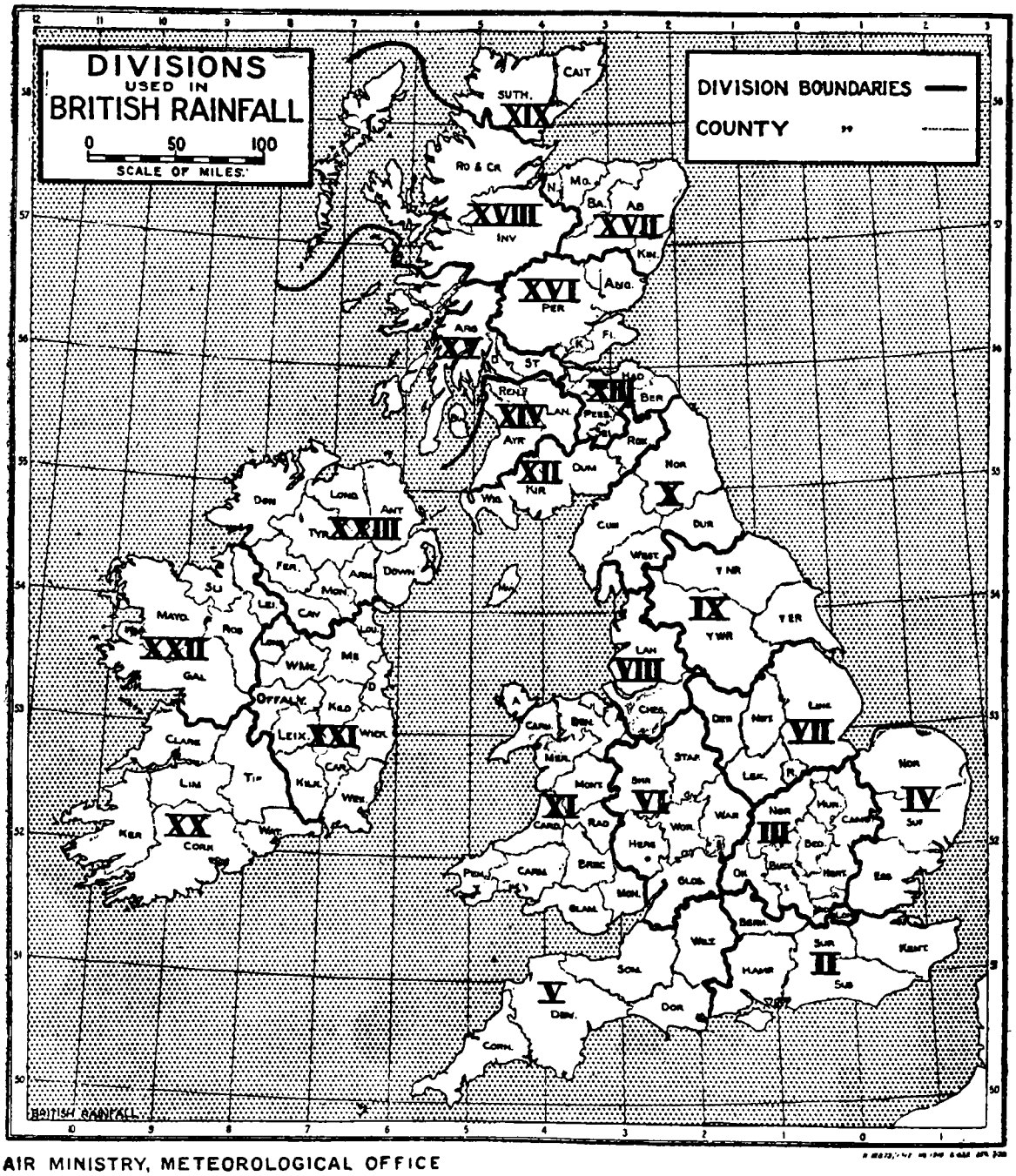
PART III

General Table of

TOTAL RAINFALL IN 1930

AT STATIONS IN GREAT BRITAIN AND IRELAND WITH THE NAMES OF THE OBSERVERS OR OTHER AUTHORITIES FOR THE OBSERVATIONS

Issued by the Authority of the Meteorological Committee



AIR MINISTRY, METEOROLOGICAL OFFICE

GENERAL TABLE OF TOTAL RAINFALL IN 1930.

EXPLANATORY NOTE.

The Divisions of Great Britain in the General Table are the same as those adopted by the Registrars-General of England and Scotland. They are shown on the map facing this page.

The counties are divided up into numbered areas, corresponding to the river-basins. An account of these river-divisions for England and Wales was given in a special article in Part I of *British Rainfall,* 1910 (pp. 37-66), and a similar article on the river-divisions of Scotland and Ireland appeared in Part I of *British Rainfall,* 1911 (pp. 40-72), with detailed maps showing all the river-divisions in each Division. Reprints of these articles are available. The areas of the river basins of the Great Ouse and tributaries in Norfolk and Cambridge were redetermined in 1928; the values printed in this volume and in the volume for 1927 differ slightly from those published in *British Rainfall* from 1910 to 1926. The sequence of river divisions in Great Britain proceeds anti-clockwise from the Solway Firth. For example, in the West Riding of Yorkshire we have four divisions for rivers flowing to the Irish Sea, followed by eight divisions for rivers tributary to the Humber.

The stations in each river-division are arranged nearly in the order of their latitude from South to North. For convenience, the first name defining a station is that of a place which can be found on any large scale map; occasionally it is an adjoining county. The second name is added to fix the site of observation more closely, *e.g.*, "Haslemere (Clammer Hill)" means Clammer Hill, near Haslemere.

In some cases the records have been received from a local rainfall organization. This has been indicated by a footnote.

In the column headed "Diameter," figures in old style type indicate the length of the sides of rectangular gauges.

The letter D signifies that daily observations have been received and are complete for the year; d, that less complete daily records have been received; W indicates that weekly readings have been received, and M that the gauge is read only once a month, usually on the 1st.

(R) denotes that the gauge is a mechanical one the correct reading of which depends on the mechanism being in working order.

(A) denotes that the amount of rainfall is taken from the chart of an autographic instrument.

(+A) denotes that the amount of rainfall is taken from an ordinary gauge and that an autographic instrument is also in use.

Where two or more gauges are maintained at the same station the comparison of the records is seldom of general interest. The rule has now been adopted that in such cases only one record will normally be published in *British Rainfall*. The use of mechanical gauges for measuring the total rainfall is not recommended by the Meteorological Office and the number of records marked (R) or (A) is therefore small.

Gauges which have been inspected and found to be over-exposed on moorland have been so marked. It is likely that there are other gauges (notably some of those at lighthouses) which are also over-exposed.

The column for the total rainfall in millimetres, which was a feature of the corresponding table in the volumes for the years 1914 to 1925, has been omitted since 1926, and the space thus set free is devoted to a column for average annual totals, expressed in inches, to the nearest tenth of an inch. The averages are printed in ordinary type if they are either the mean of the annual values for the standard period 1881 to 1915, or, in the case of shorter records, if they have been reduced by the accepted method to the standard period. If the computation has been made outside the office the average is printed in italics, since it may subsequently be revised slightly. The average is also given in italics if it is the mean for twenty or more years other than the standard period or if the mean has been weighted to some other period. Averages for the standard period of 35 years 1881 to 1915, are always preferred for entry in the table. Most of the averages printed in italics in Ireland, the north of Scotland and Cornwall have been kindly computed by Mr. H. P. Cornish of Keswick and these are weighted to the standard period 1881 to 1915.

A few entries of total rain will be found in brackets—indicating that the values have been corrected, *e.g.*, when snow has been lost, when the amount for a short period has been computed from other records, or when the gauge has been moved a short distance during the year. A record is not as a rule printed if the gauge has been moved more than a mile, or if there is a greater difference than 50 ft. of altitude between the two positions.

A note of interrogation (?) implies doubt, not necessarily error. The absence of information is indicated by ..

COUNTY INDEX TO GENERAL TABLE.

ENGLAND.

Bedford	168	Hereford	188	Oxford	165
Berkshire	160	Hertford	163	Rutland	194
Buckingham	164	Huntingdon	167	Shropshire	189
Cambridge	168	Kent	151	Somerset	183
Cheshire	198	Lancashire	199	Stafford	190
Cornwall and Scilly	182	Leicester	193	Suffolk	171
Cumberland	214	Lincoln	194	Surrey	147
Derby	196	London	146	Sussex	154
Devon	177	Middlesex	162	Warwick	192
Dorset	176	Monmouth	216	Westmorland	215
Durham	212	Norfolk	173	Wiltshire	174
Essex	169	Northampton	166	Worcester	191
Gloucester	186	Northumberland	213	Yorkshire	204
Hampshire	157	Nottingham	195		

WALES.

Anglesey	226	Carnarvon	225	Merioneth	224
Brecon	220	Denbigh	223	Montgomery	222
Cardigan	219	Flint	223	Pembroke	219
Carmarthen	219	Glamorgan	217	Radnor	222

ISLANDS.

Isle of Man	226	Channel Islands	226

SCOTLAND.

Aberdeen	244	Fife	239	Peebles	230
Angus (Forfar)	243	Haddington	231	Perth	240
Argyll	237	Inverness	246	Renfrew	235
Ayr	234	Kincardine	243	Ross and Cromarty	247
Banff	245	Kinross	239	Roxburgh	229
Berwick	230	Kirkcudbright	228	Selkirk	230
Bute	237	Lanark	233	Shetland	249
Caithness	249	Linlithgow	232	Stirling	236
Clackmannan	239	Midlothian	231	Sutherland	248
Cromarty and Ross	247	Moray (Elgin)	245	Wigtown	228
Dumbarton	236	Nairn	245		
Dumfries	229	Orkney	249		

IRELAND.

Antrim	260	Kerry	251	Monaghan	258
Armagh	259	Kildare	254	Offaly (King's Co.)	254
Carlow	254	Kilkenny	253	Roscommon	257
Cavan	258	Leitrim	258	Sligo	257
Clare	252	Leix (Queen's Co.)	254	Tipperary	251
Cork	250	Limerick	252	Tyrone	261
Donegal	261	Londonderry	260	Waterford	251
Down	259	Longford	256	Westmeath	256
Dublin	255	Louth	256	Wexford	253
Fermanagh	258	Mayo	257	Wicklow	253
Galway	256	Meath	255		

ENGLAND AND WALES.

DIVISION I—LONDON. (Area, 117 sq. mi.)

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	1.—THAMES.—Right Bank Tributaries. 67 sq. mi.		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	BERMONDSEY.								
D	Southwark Park	London County Council	5	1 0	9	..	29·54	170	139
	LAMBETH.								
D	Brockwell Park	London County Council	5	1 0	120	..	26·87	154	125
d	Brixton Hill Reservoir	Met. Water Board	5	1 1	121	..	25·95	(170)	(121)
	BATTERSEA.								
D	Battersea Park	London County Council	5	1 0	13	..	25·13	162	127
	WANDSWORTH.								
D	Streatham (Arragon Gardens)	L. C. Johnson, Esq., F.R.S.	5	1 0	200	..	25·55	171	129
D	Streatham (Conyers Road)	Met. Water Board	5	1 0	119	*23·6*	24·89	170	123
D	Streatham Hill Reservoir	Met. Water Board	5	1 0	205	..	(25·80)	(159)	(126)
D	Putney Heath Reservoir	Met. Water Board	5	1 6	179	*24·9*	24·51	181	130
D	Balham High Road (+A)	E. J. Elford, Esq., C.E.	5	1 6	89	..	26·77	168	127
d	Dulwich (Pond House)	R. J. May, Esq.	5	0 5	200	..	25·90	..	..
D	Southfields (Coronation Gds) (+A)	E. J. Elford, Esq., C.E.	5	1 6	37	..	24·39	186	125
D	Larkhall Rise	Guy M. Quiller, Esq.	5	1 1	55	..	25·93	170	131
	CAMBERWELL.								
D	Nunhead (Nunhead Reservoir)	Met. Water Board	5	1 0	175	*23·1*	28·43	173	122
	DEPTFORD.								
D	Telegraph Hill	London County Council	5	1 0	135	..	26·56	153	125
D	Waterworks	Met. Water Board	5	1 0	20	*23·0*	28·57	157	127
	GREENWICH.								
D	Deptford Pumping Station (+A)	London County Council	8	1 0	18	*24·9*	27·37	153	123
D	Royal Observatory	Sir F. W. Dyson, F.R.S.	8	0 5	149	23·5	27·41	175	121
D	Westcombe Park Road	Rev. T. R. Price	8	1 3	154	..	25·44	165	104
	LEWISHAM.								
D	Forest Hill Reservoir	Met. Water Board	5	1 0	337	*25·9*	30·71	186	141
D	Clarendon Road	G. E. Dacey, Esq.	5	1 0	98	..	29·90	192	135
	WOOLWICH.								
D	Eltham (High Street)	Met. Water Board	5	1 0	245	*24·3*	25·15	157	131
	2.—THAMES.—Left Bank Tributaries. 50 sq. mi.								
	KENSINGTON.								
D	Harley Gardens	Mrs. Hamlyn Price	5	1 5	29	..	26·34	176	139
D	Holland House	Mr. P. B. Rintoul	5	1 0	69	*24·9*	25·85	160	132
D	Cam House Gardens	Lord Phillimore	5	3 0	100	..	25·65	170	133
D	Campden Hill Reservoir	Met. Water Board	5	1 0	142	*27·5*	25·00	164	126
D	Kensington Palace (+A)	The Meteorological Office	8	1 0	80	..	26·80	179	131
	HAMMERSMITH.								
D	The Creek	London County Council	5	3 0	19	..	25·72	170	132
	FULHAM.								
D	Hammersmith Cemetery	R. J. Brown, Esq.	5	1 0	17	..	23·84	157	126
D	Bishops Park (+A)	A. F. Holden, Esq., C.E.	5	0 11	15	..	24·60	155	127

DIVISION I—LONDON—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	2.—THAMES.—Left Bank Tributaries—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	CHELSEA.								
D	Physic Garden	W. Hales, Esq.	5	1 0	20	*23·8*	24·71	167	124
D	Oakley Street	A. Hampton Brown, Esq.	5	1 0	25	..	24·46	169	124
D	St. Luke's Gardens	W. R. Manning, Esq., C.E.	5	1 0	25	*24·9*	24·45	164	126
	WESTMINSTER.								
D	Western Pumping Station	London County Council	8	1 0	19	*23·5*	23·95	162	121
D	King's Scholar's Pond	London County Council	8	11 6	31	..	24·34	174	117
D	Buckingham Palace	Mr. A. J. Cole	5	8 0	35	*24·9*	26·15	171	127
D	Kensington Gardens	Prof. S. M. Dixon	5	1 0	78	..	24·75	166	130
D	St. James's Park (+A)	The Meteorological Office	8	1 0	27	22·4	26·14	164	131
D	Spring Gardens	London County Council	8	6 0	35	*24·0*	26·33	168	127
	ST. MARYLEBONE.								
D	Royal Botanic Gardens	J. L. North, Esq.	8	1 0	130	*26·6*	28·90	189	144
	HAMPSTEAD.								
D	Barrow Hill Reservoir	Met. Water Board	5	1 0	175	*25·2*	28·22	174	141
D	Kidderpore Reservoir	Met. Water Board	5	1 0	328	*24·8*	24·50	138	122
D	Observatory	E. L. Hawke, Esq.	8	1 0	450	..	27·99	247	137
d	North Square	M. B. Wright, Esq., M.D.	5	1 0	250	..	27·42	..	..
D	Golders Hill Park	London County Council	5	1 0	350	..	26·47	179	141
	ST. PANCRAS.								
D	Camden Square (+A)	Royal Meteorological Soc.	8	1 0	110	24·5	28·84	176	135
D	Camden Square *Snowdon*	Royal Meteorological Soc.	5	1 0	110	24·5	28·84	176	135
M	Camden Square	Royal Meteorological Soc.	5	1 0	110	..	28·91	..	..
D	Kentish Town (C. E. School)	V. E. Steers, Esq.	5	1 0	80	..	29·53	186	135
	STOKE NEWINGTON.								
D	New River Filter Beds	Met. Water Board	5	1 3	101	*24·6*	27·29	162	129
D	New River Reservoirs	Met. Water Board	5	1 0	105	*25·4*	27·15	170	136
	HACKNEY.								
D	Clapton Pond (+A)	P. Holt, Esq., C.E.	5	1 0	69	*24·2*	25·19	164	129
	FINSBURY.								
D	New River Head	Met. Water Board	8	1 0	95	*23·5*	24·76	156	127
	BETHNAL GREEN.								
d	Victoria Park	London County Council	5	1 0	43	..	28·08	..	133
	POPLAR.								
D	Isle of Dogs (Island Gardens)	London County Council.	5	1 0	18	..	25·38	154	114
D	Old Ford Pumping Station	Met. Water Board	8	0 9	19	*23·7*	25·08	165	125
D	Old Ford (Penstock House) (+A)	London County Council	8	1 0	43	*23·6*	27·37	165	129
	WOOLWICH.								
D	N. Woolwich Pumping Stn. (+A)	London County Council	8	0 9	12	*22·9*	23·18	149	122
D	Barking Outfall	London County Council	8	0 9	9	*21·8*	22·99	165	123

DIVISION II—SOUTH-EASTERN COUNTIES

SURREY. (Area, 725 sq. mi.)

1.—ARUN. 45 sq. mi.

D	Haslemere (Clammer Hill)	Mrs. Glennie	5	1 6	400	*35·8*	37·10	186	142
D	Haslemere (Grayshurst)	C. W. Dixon, Esq.	5	1 0	621	..	35·96	178	141
D	Chiddingfold (Stonehurst)	H.St.JohnH.Bashall,Esq.	5	1 0	200	..	34·12	157	117
D	Hambledon (Rossall)	L. R. Furneaux, Esq.	5	1 0	250	..	32·40	191	131

2.—MEDWAY. 50 sq. mi.

D	East Grinstead (Lockeridge)	Lt.-Col. J. F. Forbes, D.S.O.	5	1 0	320	..	31·26	204	143
D	Dormans Park (Chartham Park)	I. D. Margary, Esq.	5	1 0	270	..	30·69	187	127

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—MEDWAY—(*con.*).								
D	Dormans Park (Hill Crest)	Dr. H. R. Mill	5	1 0	320	..	31·90	193	131
D	Lingfield (Felcourt)	R. McAlpine, Esq.	5	1 3	225	..	32·56	174	135
D	S. Godstone (Hartsridge)	F. E. Goad, Esq.	5	0 10	450	..	32·08	188	141
D	Bletchingley (North Park Farm)	H. C. Millen, Esq.	5	1 0	400	..	33·39	196	146
D	Oxted (Stone Hall)	W. P. Metcalfe, Esq.	5	1 5	320	..	30·50	188	143
D	Oxted (West Heath)	Norman W. Grieve, Esq.	8	1 2	500	..	32·83	183	145
	3.—THAMES—Darent. 22 sq. mi.								
	Chelsham (Ledgers)	Mrs. H. A. Daniell	5	1 5	620	..	34·88	..	..
D	Farleigh (Croydon Ment. Hosp.)	Croydon Corporation	8	1 0	100	..	34·27	176	147
	Chelsham (Fairchildes)	A. S. Daniell, Esq.	5	0 8	600	33·7	32·53	..	..
D	Addington (Hares Bk. Pump. Sta.)	Croydon Corporation	8	1 0	331	..	30·31	173	139
D	Addington Hills Reservoir	Croydon Corporation	8	1 0	472	*29·4*	29·72	164	131
D	Norwood (Auckland Road)	Miss J. Cooper	5	1 5	230	*23·7*	24·39	164	118
	4.—THAMES—Wandle. 71 sq. mi.								
D	Kingswood (Margery Hall Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	691	..	32·79	192	146
M	Woldingham Reservoir (*New G*)	A. E. Cornewall-Walker, Esq.	5	1 6	841	..	34·93	..	..
D	Caterham Reservoir	A. E. Cornewall-Walker, Esq.	5	1 2	717	*34·6*	35·16	199	158
D	Caterham Valley (Croydon Rd.)	A. M. Worfolk, Esq.	5	6 0	435	..	36·74	184	145
D	Tadworth (Glade House)	W. J. Saunders, Esq.	5	1 0	545	..	32·91	188	142
D	Chelsham & Woldingham W.W.	A. E. Cornewall-Walker, Esq.	5	1 0	479	..	34·91	187	147
D	Woldingham (Marden Park)	J. F. N. Grange, Esq.	5	1 0	500	..	34·23	192	134
D	Caterham Valley Depot	A. E. Cornewall-Walker, Esq.	5	1 6	431	..	34·96	217	149
d	Warlingham (Council School)	W. P. Jeal, Esq.	5	1 0	600	..	(34·65)	..	..
d	Coulsdon (Netherne Ment. Hosp.)	The Clerk and Steward	8	0 10	540	..	31·77	(183)	(139)
D	Banstead (Burgh Heath)	Capt. E. R. Taylor	5	1 0	571	*32·6*	32·02	187	135
D	Banstead (Burgh Heath Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	570	*32·7*	30·48	176	129
M	Chipstead (How Green Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	528	..	31·53	..	..
D	Kenley Pumping Station	A. E. Cornewall-Walker, Esq.	5	1 6	275	..	28·41	186	137
	Coulsdon (The Chase)	J. H. Lowe Esq.	5	0 6	400	..	29·41	195	138
D	Coulsdon (Marlpit Lane)	Charles Knight, Esq.	5	0 6	350	..	32·40	193	136
D	Banstead Mental Hospital	S. J. Wray, Esq.	5	5 0	410	..	28·15	177	145
D	Purley (Oakwood Avenue)	E. W. Finch, Esq.	5	1 0	380	..	28·66	181	130
D	Purley (Pumping Station)	A. E. Cornewall-Walker, Esq.	5	1 3	225	*30·1*	30·02	202	139
d	Purley (Russell Hill)	Mrs. Gilbee	5	1 0	350	..	30·59	..	..
D	Purley (Green Lane)	E. E. Bluett, Esq.	5	1 0	341	..	29·97	171	133
D	Purley (Hillcrest Road)	W. J. Fisher, Esq.	8	1 6	340	..	29·96	191	134
D	Purley (St. Mark's Vicarage)	Mrs. Shattock	5	1 0	336	..	29·10	173	135
D	Croydon Aerodrome (+A)	The Meteorological Office	8	1 0	217	26·7	27·23	172	123
D	South Croydon (Avondale Road)	G. Macdonald Davies, Esq.	5	1 0	195	*29·4*	29·00	183	131
d	South Croydon (Harewood Rd.)	Mrs. Morland	6	0 8	300	..	26·25	152	123
D	Carshalton (Sewage Works)	Surveyor, U.D.C.	5	1 0	118	*25·9*	26·31	158	122
D	Carshalton (The Grove)	H. J. Spicer, Esq.	5	1 0	129	..	26·50	..	..
D	Beddington (Sewage Farm)	Croydon Corporation	5	1 0	129	..	24·81	185	119
D	Croydon (Northampton Road)	Mrs. Higgins	5	1 0	210	..	27·31	172	130
D	Wimbledon (Trinity Road)	P. J Bevan, Esq., C. E.	5	1 0	53	..	25·76	158	128
D	Wimbledon (Compton Road)	G. H. Cheesman, Esq.	5	1 6	80	..	24·41	173	126
D	Wimbledon (Sewage Pmp. Sta.)	T. Webster, Esq., C.E.	5	1 0	55	..	24·37	163	124
	5.—THAMES—Mole & c. 229 sq. mi.								
D	Horley (Wrays)	A. R. Allcroft, Esq.	5	1 0	290	..	33·43	154	139
D	Outwood (The Orchards)	H. Gurney, Esq.	5	1 0	274	26·0	30·11	184	133
D	Dorking (Bramerton)	Rev. Jas. F. Twist	5	1 0	300	..	34·79	176	140
	Dorking (Denbies)	Mr. J. Ansell	5	0 6	610	32·2	35·30	166	..
D	Brockham	H. R. Kempe, Esq., C.E.	8	0 9	180	*31·2*	33·37	155	126
D	Betchworth (Snower Hill)	T. DuBuisson, Esq.	8	0 11	250	..	32·42	178	140

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SURREY—(*con.*).		*in.*	*ft. in.*	*ft*	*in.*	*in.*		
	5.—THAMES—Mole & c.—(*con.*).								
	South Nutfield (Hale Edge)	R. C. Grant, Esq.	5	1 0	250	*28·7*	30·50	189	152
D	Earlswood (Sewage Farm)	F. T. Clayton, Esq., C.E.	5	1 6	196	..	30·20	161	134
D	Redhill (London Road)	A. E. Cornewall-Walker, Esq.	5	1 6	270	..	30·73	188	133
D	Reigate (Woodcote)	Herbert Crosfield, Esq., J.P.	5	0 10	310	..	30·87	191	141
D	Reigate (Wray Park Road)	W. J. MacAndrew, Esq.	5	1 0	330	..	31·27	194	136
D	Reigate (Castle Grounds)	F. T. Clayton, Esq., C.E.	5	1 0	350	*30·4*	31·17	198	145
D	Reigate (Thurso)	F. S. Smith, Esq.	8	1 0	270	..	27·30	161	117
D	Nutfield (Elstree) *old g*	D. Morphew, Esq.	5	1 0	430	..	30·03	197	131
D	Nutfield (Elstree) *new g*	D. Morphew, Esq.	5	1 0	430	..	30·90	194	133
d	Bletchingley (South Park Fm)	Uvedale H. Lambert, Esq.	5	1 0	340	*31·4*	29·42	..	120
d	Merstham (Gatton Point)	C. F. Bull, Esq.	5	1 0	300	..	33·12	..	..
D	Gatton (The Cottage)	J. F. E. Goad, Esq.	5	0 11	434	..	29·88	221	150
D	Headley Rectory	Rev. T. E. R. Phillips	5	1 0	570	..	32·96	197	135
d	Headley (The Hurst)	Mrs. Lyall	5	1 3	420	*32·2*	31·55	..	..
D	Walton-on-the-Hill	Mr. J. Millichamp	5	1 0	600	*31·7*	32·73	202	141
D	Fetcham W.W.	A. E. Cornewall-Walker, Esq.	5	1 0	102	..	29·92	183	137
D	Leatherhead (Dunard Lodge)	G. R. Crompton, Esq.	8	1 0	233	..	29·51	184	130
D	Tadworth	C. H. L. Blaxland, Esq.	5	1 4	600	..	32·41	219	160
D	Ashstead (The Hut)	Mr. E. Langridge	5	1 0	230	..	26·16	164	128
d	Epsom College	S. A. Weare, Esq.	8	1 6	300	..	(27·85)	(168)	(127)
D	Epsom (Sewage Farm)	E. G. Timbrell, Esq., C.E.	8	1 0	120	*25·4*	22·94	164	114
D	Whiteley Village (Fox Oak)	H. E. Cooke, Esq.	8	3 4	195	..	23·84	182	127
D	Cobham (Uplands)	R. S. Morrish, Esq.	5	0 6	180	..	26·89	161	140
d	Cobham (Sandroyd School)	C. St. John Shortt, Esq.	5	1 6	120	..	23·52	..	126
	Weybridge (St. George's Hill)	Mrs. Buckley	5	0 10	200	..	24·94	158	121
D	Sutton (Camborne Road)	F. E. Wright, Esq.	5	1 0	250	*29·3*	28·36	194	128
D	Claygate (Hertslets)	N. C. Armitage, Esq.	5	1 0	106	..	25·67	192	128
D	Esher (Halidon)	D. H. Baird, Esq., C.B.E.	5	1 5	114	..	24·97	172	128
D	Sutton (Waterworks)	W. Vaux Graham, Esq., C.E.	5	1 6	166	*26·0*	27·24	158	126
D	Sutton (Sewage Works)	W. H. Grieves, Esq., C.E.	5	2 5	99	*28·8*	25·60	164	120
D	Worcester Park (Kingsmead Ave.)	Spencer Russell, Esq.	5	1 0	108	..	26·00	190	127
d	Worcester Park (Sewage Works)	W. H. Grieves, Esq., C.E.	5	3 0	60	..	23·35	..	112
D	Surbiton (Seething Wells)	Met. Water Board	5	0 10	34	*24·9*	25·83	162	128
D	Surbiton (Effingham Road)	K. G. Willis, Esq.	5	1 1	..	..	26·33	190	126
D	West Molesey (Walton Works)	Met. Water Board	5	0 6	35	*23·5*	22·88	158	128
D	New Malden (Dunbar Road)	J. W. Harris, Esq.	5	1 0	50	..	26·81	175	130
D	New Malden (Sewage Works)	R. H. Jeffes, Esq., C.E.	5	1 0	48	*23·4*	23·57	166	124
d	Kingston (County Hall)	H. Wilson, Esq.	5	0 9	31	*26·0*	22·76	..	119
D	Kingston Sewage Works	P. G. Lloyd, Esq.	5	1 0	25	*27·9*	24·23	154	125
D	Merton Park (Mostyn Rd.)	A. T. Bench, Esq.	5	1 0	55	..	26·55	188	130
D	Merton Park (Innes Hort. Inst.)	A. Hoskin, Esq.	5	1 0	55	..	25·11	175	129
D	Merton (Joseph Hood Rec. Gd.)	The Engineer	5	1 0	48	..	23·63	159	130
d	Raynes Park (C. School)	C. V. Manley, Esq.	5	1 0	50	..	(26·16)	(169)	(134)
D	Raynes Park (CottenhamPk P.S.)	T. Webster, Esq., C.E.	5	1 2	50	*24·9*	23·62	149	121
D	Raynes Park (Richmond Road)	W. B. de Winton, Esq.	5	1 0	70	..	27·11	189	141
D	Wimbledon (Worple Road)	N. Lang Smith, Esq.	5	1 0	75	..	25·36	170	128
D	Richmond (Terrace Gardens)	G. Humpfreys, Esq.	5	1 6	25	*24·9*	25·39	169	128
D	Richmond (Kew Observatory)(+A)	The Meteorological Office	8	1 0	18	23 8	25·34	166	125
D	Mortlake (Hammersmith Cem.)	R. J. Brown, Esq.	5	1 0	23	..	24·13	167	128
D	Kew (Royal Botanic Gardens)	The Director	8	0 9	20	..	24·99	163	129
D	Barnes (Barn Elms)	Met. Water Board	5	1 0	16	..	24·60	165	130
	6.—THAMES—Wey. 236 sq. mi.								
D	Haslemere (U.D.C. Depot)	A. G. Whitcher, Esq.	5	1 0	475	*36·2*	41·46	173	150
D	Haslemere (Frensham Hall Gdns.)	H. Windibank, Esq.	5	2 0	750	..	37·71	197	152
D	Haslemere (Frensham Hall Farm)	H. Windibank, Esq.	5	1 0	600	*37·4*	35·81	195	145
D	Haslemere (Furnace Place)	F. J. Barlow, Esq.	5	1 0	300	..	35·95	174	139
D	Hindhead (Littledale)*	F. Harrison, Esq.	5	1 0	770	..	34·33	168	148
D	Oakwood Hill (Honeywood Ho.)	The Lady Tredegar	5	1 0	280	..	31·22	212	146
D	Witley (King Edward's School)	E. Townsend, Esq.	5	1 0	300	..	31·25	174	122
D	Witley (King George V. Sanatm.)	Dr. J. Watt	5	1 0	305	..	31·71	178	140
D	Churt (Furze Hills)	Rev. C. G. O. Bond, M.A.	5	1 6	390	..	33·54	199	158

* Formerly called Haslemere (Littledale).

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	6.—THAMES—Wey—(*con.*).								
D	Churt (Bron-y-dê)	Rt. Hon. D. Lloyd George..	8	1 11	350	..	31·54	197	139
D	Hascombe Place	C. T. Musgrave, Esq.....	5	1 0	390	*33·5*	34·97	206	146
D	Cranleigh (Homefield Cottage)	W. S. Sarel, Esq., C.B.....	5	1 9	180	..	32·72	202	137
D	Cranleigh (Ruffold Lodge)	R. H. Pearce, E q.....	5	1 3	..	..	30·99	193	139
D	Godalming (Hascombe)	Mrs. Francis Howard.....	5	1 0	390	..	33·37	189	145
D	Ewhurst (Coneyhurst)	Col. R. J. Few, D.S.O.....	8	1 0	607	*33·7*	33·81	187	149
D	Ewhurst (The Four Winds)	Miss E. Brooke.....	5	1 0	809	..	33·92	191	148
d	Ewhurst (Woolpits)	Mr. W. Harrison.....	8	1 6	600	*32·8*	33·83	..	147
D	Frensham (Spreakley Hollow)	A. R. Crossley, Esq.....	5	1 0	200	..	29·47	176	135
d	Godalming (Munstead Heath)	A. M. P. Hodsoll, Esq.....	5	1 0	450	..	31·55	..	121
d	Godalming (Greylees)	A. Ewan, Esq.....	5	1 0	150	..	28·95	..	132
	Godalming (Westbrook)	T. Turner, Esq.....	5	1 0	280	..	27·34	..	..
D	Godalming (Charterhouse)	O. H. Latter, Esq.....	5	1 0	130	29·2	28·77	191	133
d	Wonersh (Little Tangley)	Mrs. Kinnersley Hooper....	5	1 0	200	..	29·22	..	132
D	Shackleford (Hall Place)	Mr. E. Nash.....	8	1 2	200	..	28·56	162	132
D	Peaslake (Dewdney)	late Sir F. G. Ogilvie, C.B...	5	1 0	532	..	32·95	174	140
D	Bramley (Wood View)	Rev. C. J. Etty.....	5	1 0	135	..	31·19	183	147
D	Abinger Hill School	B. R. Delap, Esq.....	5	1 0	670	..	37·16	176	148
	Compton (Sandy Knowe Gdns.)	Mrs. F. Haughton.....	..	..	..	..	27·35	..	..
D	Shere (Manor House)	R. A. Bray, Esq.....	5	1 0	330	..	31·25	212	142
D	Shere (The Rectory)	Rev. Sir P. M. Bowman, Bt.	5	1 3	200	..	31·39	191	131
D	Albury (Dalton Hill Gardens)	Mr. J. Tidy.....	5	1 0	250	..	30·45	166	132
D	Abinger Hall	Lord Farrer.....	8	1 0	360	*36·5*	36·70	217	156
D	Farnham (Crooksbury Ridges)	F. R. Walters, Esq., M.D...	5	1 4	440	*31·0*	30·53	221	140
D	Farnham (Short Heath Lodge)	Col. G. Chrystie.....	5	1 0	365	*30·1*	30·15	193	137
D	Farnham (Bourne Corner)	Miss I. M. Deedes.....	5	1 0	365	..	29·45	184	131
D	Puttenham (Berthorpe)	Capt. E. H. Tuckwell, M.C..	5	1 0	350	..	24·82	185	134
D	Guildford (Pilgrim Wood)	H. A. Powell, Esq., M.D....	5	1 0	320	..	29·34	191	127
D	Guildford (Briarfield)	Miss L. B. Swaine.....	5	1 0	300	*29·7*	29·75	184	136
D	Guildford (Pewley Hill)	Miss H. S. Pitman.....	5	1 0	365	..	30·58	233	137
D	Guildford (West Mount)	Miss M. E. Powell.....	5	1 0	220	..	28·87	176	128
d	Guildford (Kilvington)	Miss Meynell.....	5	1 0	300	..	28·45	..	..
D	Guildford (Cross Lanes)	F. F. Smallpiece, Esq.....	5	1 7	200	*28·6*	27·84	176	132
D	Normandy (The Manor House)	E. S. Hose, Esq., C.M.G....	5	1 4	149	..	28·62	177	133
d	Merrow (Stoodwell)	S. Eustace, Esq.	5	0 10	250	..	27·44	..	..
D	East Clandon (Hatchlands)	F. A. Akers, Esq.....	5	1 0	340	..	30·10	195	132
D	West Clandon	W. Fidkin, Esq., C.E.....	8	1 0	319	..	29·17	185	130
D	Worplesdon (Openwood)	D. H. Welch, Esq.....	5	0 8	160	..	28·26	167	131
D	Worplesdon (Golf Club)	R. Goring Thomas, Esq....	5	1 6	168	..	26·91	164	136
D	Send (Woodside)	G. M. Osborne, Esq.....	8	0 10	146	..	27·65	190	129
D	Sutton Green (Pyle Hill)	Capt. S. Price-Williams....	5	1 6	140	..	26·15	163	130
D	Ripley (Ripley Court)	Captain C. M. H. Pearce...	5	1 5	86	..	25·84	176	134
D	Woking (The Grange)	Miss M. E. Wilson.....	5	1 0	78	26·1	28·98	203	143
D	Woking Westfield	Vernon B. Longhurst, Esq..	5	1 0	100	..	28·48	193	133
D	Woking (Hook Heath)	W. S. Patterson, Esq.....	5	1 0	160	..	27·65	166	133
D	Woking (The Green)	Mrs. G. E. Howlett.....	5	0 9	122	..	26·22	187	142
	Woking (Goldsworth)	Mrs. S. Slocock.....	5	1 4	110	..	(26·58)	..	..
D	Horsell (The Vicarage)	Rev. Canon Norman Pares..	5	1 1	140	..	24·69	173	130
D	Horsell (Hollesley)	Col. A. de B. V. Paget.....	5	1 1	100	..	24·91	168	124
D	Wisley (R.H.S. Gardens)	Royal Horticultural Soc....	8	1 0	150	24·1	24·76	191	136
D	Wisley (Outfall Works)	Capt. H. Beeney.....	5	1 0	..	..	27·78	178	137
D	Byfleet (West Hall Gardens)	Mr. G. Carpenter.....	5	2 0	63	..	25·70	170	135
D	West Byfleet (Kilmeena)	F. Littleboy, Esq.....	5	1 0	100	..	25·81	166	134
D	West Byfleet (Starcross)	Walter W. Way, Esq.	5	1 0	110	..	27·47	161	129
d	West Byfleet (Scotland Bridge)	Capt. H. Beeney.....	5	1 0	69	..	24·60	..	122
D	Weybridge (St. Michael's)	H. I. Bond, Esq.....	5	1 0	115	..	25·20	193	132
D	Weybridge (Heath Field)	Miss A. T. Gardiner.....	5	1 0	100	*26·5*	27·50	172	141
D	Weybridge (Oil Mills)	A. Whittet, Esq.....	5	1 0	36	24·1	23·52	171	127

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—THAMES—Bourne. 55 sq. mi.								
D	Knap Hill (Ulundi)	G. C. H. Simmonds, Esq.	5	1 0	181	..	23·93	166	131
D	Chobham (Sandpit Hall)	K. H. Power, Esq.	5	1 0	100	*26·7*	25·65	174	133
D	Chobham (West End)	F. A. Walter, Esq.	5	1 0	150	..	30·18	200	147
D	Bagshot (Charlton)	W. Perry, Esq.	5	0 10	215	..	27·40	163	128
D	Bagshot	J. Waterer Sons & Crisp, Ltd.	5	1 0	265	..	27·44	157	134
	Windlesham (Sutherland Ho.)	O. H. Bradnack, Esq.	4	1 0	300	..	28·60	..	134
D	Chertsey (Botleys Park)	Mr. H. Whitmarsh	5	1 5	111	..	26·30	171	135
D	Upper Childown (Long Cross H.)	Miss C.M.Leycester-Penrhyn	5	1 0	200	..	27·35	214	137
d	Sunningdale (Hilltop)	E. F. Cecil, Esq.	5	1 0	280	..	27·44	..	129
D	Chertsey (Abbey Meads)	W. Fidkin, Esq., C.E.	8	1 0	53	..	23·71	165	130
d	Virginia Water (S. Ann's Heath)	H. Y. Summons, Esq.	8	1 1	120	*25·4*	27·20	..	122
	8.—THAMES—Lodden. 17 sq. mi.								
D	Frimley Green Waterworks	S. G. Weller, Esq.	5	0 7	220	*24·6*	25·88	167	128
D	Frimley Green (Ridgemount)	C. C. Haviland, Esq.	5	0 9	350	*29·1*	29·60	229	141
D	Camberley (Way's End)	E. Ernest Green, Esq.	5	0 11	295	..	26·91	170	143
D	Camberley (Cordwalles)	C. H. Ledward, Esq.	5	1 0	400	..	26·29	173	132
	KENT. (Area, 1,532 sq. mi.)								
	1.—ROTHER & C. 217 sq. mi.								
D	Lydd (The Paddock)	Dr. J. A. Proctor	5	1 0	10	..	33·52	199	132
d	Lydd (Westbroke House)	A. G. Finn, Esq., J.P.	5	1 0	10	..	31·10	..	120
d	Brookland (Thrift Farm)	C. Clark, Esq.	12	3 0	11	..	33·38	..	124
D	Dymchurch (Grove House)	R. S. Jones, Esq.	5	1 0	8	..	30·61	179	131
d	Dymchurch (Hoornes)	Mrs. Paddock	5	1 0	9	..	30·78	..	..
D	Appledore (The Well House)	Dr. F. W. Cock	5	1 0	23	..	33·87	160	136
d	Hawkhurst (Moor House)	F. S. Springett, Esq.	5	1 0	208	..	34·62	..	125
D	Hawkhurst (Hensill)	Mrs. F. Ross Thomson	5	1 0	180	*30·5*	34·86	191	135
D	Kenardington (The Firs)	Cmdr. F. H. Lyon, D.S.O.	5	1 2	65	..	29·90	169	127
D	Tenterden (Ashenden)	Major Herbert Neve	5	1 0	190	27·5	33·04	153	130
D	Benenden (National Sanat'm)	H. Spurrier, Esq., M.B.	5	1 0	250	..	32·70	184	138
D	Hythe	M. J. Harvey, Esq., C.E.	5	0 9	12	28·0	32·17	171	131
D	Hythe (Douglas Avenue)	W. H. Elder, Esq.	5	1 0	33	..	31·87	169	132
D	Hythe (Sandling Park)	Rt. Hon. L. Hardy	8	1 0	260	*30·4*	36·36	165	136
D	Sandgate	J. A. Woodgate Esq., C.E.	5	1 0	60	..	32·26	184	140
D	Folkestone (Radnor Park West)	H. D. Seth-Smith, Esq.	5	1 0	200	..	33·49	163	136
D	Folkestone (Borough Sanat'm)	A. E. Nichols, Esq., C.E.	5	1 0	101	*28·6*	31·01	171	131
D	Folkestone (Cherry Gardens)	H. T. Turner, Esq., C.E.	5	1 6	230	29·1	34·66	189	141
D	Capel (Lower Standen)	H. T. Turner, Esq., C.E.	5	2 11	250	*31·2*	33·99	159	141
D	Dover (Waterloo Crescent)	W. B. Smith, Esq., C.E.	8	1 0	22	..	33·06	180	133
D	Dover (Waterworks)	W. B. Smith, Esq., C.E.	5	1 6	200	*30·0*	34·30	161	129
D	Dover (Buckland)	Guy Mannering, Esq.	8	1 6	50	..	39·65	159	136
D	Dover (Barton Road)	Cyril G. W. Lewis, Esq.	5	1 0	55	..	38·23	192	143
D	Kearsney (Chilton Farm)	W. B. Smith, Esq., C.E.	5	1 6	127	*33·5*	41·63	172	141
	2.—STOUR & C. 386 sq. mi.								
D	Lympne Aerodrome (+A)	The Meteorological Office	8	1 0	346	28·5	33·20	179	132
D	Sellindge (Council School)	S. H. Serpell, Esq.	5	1 0	200	..	34·14	175	134
D	Smeeth School	W. H. Wetherell, Esq.	5	1 0	300	..	34·41	217	148
D	Lyminge (Elham Valley W.W.)	Phillip Harris, Esq.	5	1 6	445	..	38·04	190	154
D	Swingfield (St. John's)	Legh S. Powell, Esq.	5	1 0	500	..	41·53	181	139
D	Ashford	B. H. Headley, Esq.	5	1 0	190	..	33·84	188	145
D	Ashford (Albert Road)	A. E. Brounger, Esq.	5	1 0	185	..	32·68	194	133
d	Elham (Bladbean Farm)	Capt. T. L. Wall	5	0 9	459	..	38·98	..	145

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—STOUR & C.—(*con.*).								
D	Dover (Martin Mill Pump. Stat.)	F. L. Ball, Esq.	5	1 0	287	..	35·82	180	137
d	Elham (Domel)	J. Hill, Esq.	5	1 6	459	..	41·98	..	139
D	Wye (Agricultural College)	Capt. A. H. Bird	5	1 0	164	..	32·50	179	132
D	Waldershare Rectory	Rev. H. Saumarez Smith	5	1 0	275	..	37·41	186	143
	Waldershare Park Gardens	J. Haggett, Esq.	8	1 0	250	*33·2*	38·48	..	140
D	Shepherdswell (Upton Lodge)	Rutley Mowll, Esq.	5	1 0	300	..	38·83	186	143
D	Boughton Aluph (Fairlawn)	E. Simmons, Esq.	5	1 3	220	..	31·85	182	132
D	Charing Pumping Station	F. L. Ball, Esq.	5	1 0	295	..	32·66	176	129
D	Charing (Pett Place) *new g*	Brig.-Gen. T. M. S. Pitt	5	1 0	350	..	33·31	178	135
D	Deal and Walmer W.W.	A. Mantle, Esq.	5	1 0	110	*28·0*	33·05	177	133
D	Barham Pumping Station	F. L. Ball, Esq.	5	..	173	..	31·93	181	128
d	Nonington (Lynton)	C. B. Grey, Esq.	5	0 10	128	..	33·91	..	..
D	Deal (Wellington Road)	Town Clerk	5	1 0	25	..	30·60	170	128
D	Worth (Upton House)	Capt. W. Elwin Napier	5	1 0	32	*27·7*	32·35	180	128
D	Worth (Felder Lodge)	J. S. Campbell, Esq.	5	0 10	26	..	29·42	191	131
D	Wingham (Margate W.W.)	Mr. J. H. Parker	5	1 0	138	*28·7*	31·34	175	130
D	Canterbury (Medical Hall)	A. Lander, Esq.	5	1 0	124	..	28·86	158	118
D	Canterbury (London Road)	Miss B. Spillett	5	1 0	66	*28·7*	30·70	173	131
D	Canterbury (Irrigation Works)	C. Terry, Esq., C.E.	5	2 6	15	*27·5*	32·81	176	135
d	Canterbury (Rough Common)	A. W. Wood, Esq.	5	1 0	285	..	31·61	..	134
D	Ramsgate (East Cliff)	Borough Engineer	8	1 0	168	*24·0*	25·75	183	124
D	Ramsgate (Archer House)	Miss E. F. Baker	5	1 0	75	..	27·27	178	117
D	Birchington (Acol Farm)	C. S. Willett, Esq.	5	2 3	30	..	28·17	193	133
D	Reculver	Allington Collard, Esq.,	5	5 2	27	*21·8*	26·06	147	121
d	Broadstairs (Domus)	Capt. W. B. Marling	8	1 0	60	..	28·06	..	129
D	Broadstairs (Collis Court Road)	A. Watkins, Esq.	5	1 0	120	..	27·66	181	133
D	St. Peter's (Hildersham House)	H. Hurd, Esq., C.E.	5	0 9	140	23·7	30·48	177	145
d	Birchington (Hollydene)	W. Tomlin, Esq., Junr.	5	6 0	75	..	28·08	..	121
D	Margate (Cliftonville)	Town Clerk	5	1 0	51	22·8	25·95	161	121
	3.—SWALE & C. 167 sq. mi.								
D	Selling (Grove House)	F. Ivo Neame, Esq.	5	1 5	330	..	31·64	150	121
D	Selling (Luton)	F. Ivo Neame, Esq.	5	4 9	263	*30·4*	32·03	154	125
D	Sittingbourne (Torry Hill)	D. Leigh Pemberton, Esq.	5	1 0	497	..	37·95	180	135
D	Ospringe (Queen Court)	L. H. Finn, Esq.	8	1 3	50	..	32·16	153	133
D	Ospringe (Lorenden)	L. H. Finn, Esq.	5	1 6	175	*27·2*	29·86	172	122
D	Faversham (Portway)	C. Gordon Neame, Esq.	5	3 6	180	..	31·15	159	125
	Teynham (Norton Court)	A. L. Mercer, Esq.	5	1 6	90	..	30·26	151	122
D	Teynham (New Gardens)	Mrs. Honeyball	5	1 5	30	*24·5*	26·36	181	108
d	Graveney Marshes	L. H. Finn, Esq.	8	2 3	6	..	22·62	..	..
D	Milton Regis (Sewage Works)	The Surveyor	5	1 1	19	..	26·50	163	109
	Herne Bay (Waterworks)	J. Roberts, Esq.	5	1 0	130	*22·8*	26·03	..	..
d	Sheppy (Eastchurch Parsonage)	H. C. Warren, Esq.	5	1 0	100	*22·9*	26·91	..	..
D	Sheerness	Dr. W. C. D. Hills	5	1 0	9	..	25·02	157	124
	4.—MEDWAY. 506 sq. mi.								
D	Bedgebury Park Gardens	Mr. H. Arnold	5	1 0	280	..	37·22	154	144
D	Woodchurch (Hengherst)	W. Mitchell, Esq.	5	1 0	152	..	34·62	165	137
D	Kilndown School	J. A. Ager, Esq.	5	1 3	365	..	33·28	157	134
D	Scotney Castle	E. W. Hussey, Esq.	5	3 9	203	26·8	32·87	181	136
D	Cranbrook (Little Glassenbury)	J. I. Stirling, Esq.	..	..	360	..	35·74	181	143
d	High Halden (Middle Quarter)	B. H. Budding, Esq.	5	1 0	114	..	31·45	..	..
D	Goudhurst (Gore Court)	J. A. Druce, Esq.	5	1 0	197	*30·3*	32·50	173	138
D	Tunbridge Wells (Hawkenbury)	D. W. Horner, Esq.	5	1 6	435	..	33·05	201	134
D	Tunbridge Wells (Rusthall Grange)	A. G. Robins, Esq.	5	1 0	440	..	31·79	182	130
D	Tunbridge Wells (Calverley Park)	Dr. F. C. Linton	5	1 0	355	27·0	32·79	190	135
D	Tun. Wells (The White House)	Miss Monica G. Robins	5	1 6	350	..	33·22	203	149
D	Tunbridge Wells (Sherwood Park)	Mr. R. G. Ellis	5	1 0	475	..	32·44	170	134

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—MEDWAY—(*con.*).								
D	Speldhurst Rectory	Rev. Canon H. Masters	5	0 10	334	..	33·22	196	134
D	Pembury (The Spring)	Miss A. P. Fowler	5	1 0	416	..	34·83	193	160
D	Pembury Waterworks	W. H. Maxwell, Esq., C.E.	8	1 8	197	..	31·10	176	130
	Southborough (Tentergarth)	Miss E. Powell	5	0 11	421	..	31·15	..	..
D	Markbeech (Edells)	Miss M. F. Pearse	5	1 0	320	..	29·38	189	133
D	Edenbridge (Falconhurst)	Hon. Mr. Justice Talbot	5	1 6	375	30·7	30·80	182	135
D	Edenbridge (Stonewall Park)	E. G. B. Meade-Waldo, Esq.	5	1 1	344	..	29·22	180	128
D	Edenbridge (Gilridge)	J. Mavrogordato, Esq.	5	1 0	400	..	31·69	186	132
D	Edenbridge (Hever Castle)	Mr. A. McCutcheon	5	1 0	200	..	30·01	160	139
D	Headcorn (Upalong)	R. S. Hartree, Esq.	5	1 3	100	..	27·72	160	122
d	Pluckley (Brick Works)	Guy G. Davies, Esq.	5	1 6	112	..	28·26	..	..
D	Penshurst Place	Lord De L'Isle and Dudley	5	1 0	120	..	31·43	206	132
D	Penshurst (Parkholt)	J. M. Sturgess, Esq.	5	0 9	265	..	27·36	167	125
D	Tonbridge (Mabledon Park)	J. F. W. Deacon, Esq.	5	1 6	190	..	30·05	186	132
D	Tonbridge (The Drive)	G. J. Kimmins, Esq.	5	0 10	165	..	(29·42)	183	138
D	Hildenborough (Gailes)	E. E. Roper, Esq.	5	1 0	159	..	28·20	184	132
D	Hildenborough (Hollanden Ho.)	C. H. Scott, Esq.	8	1 0	99	..	29·99	207	144
D	East Peckham (Central Stores)	W. H. Pearson, Esq.	8	7 6	48	..	27·19	163	131
D	Langley (Rumwood Court)	Mr. W. J. Gould	5	1 9	354	..	31·93	185	128
d	Harrietsham (Dun Akyune)	C. Mackinnon, Esq.	5	1 4	400	..	32·40	..	135
D	Nettlestead (Old Quarry)	W. Pye-English, Esq.	5	1 0	286	..	29·89	193	142
D	Otham (Synyards)	Ambrose Boyson, Esq.	5	1 0	315	..	32·78	204	131
D	Sevenoaks (River Hill) *old g*	Lt.-Col. J. M. Rogers, D.S.O.	8	1 6	500	..	27·61	173	142
D	Sevenoaks (River Hill) *new g*	Lt.-Col. J. M. Rogers, D.S.O.	5	1 0	500	..	30·44	173	143
D	Hollingbourne (Elsfield House)	Col. A. H. W. Grubb, C.M.G., D.S.O.	5	1 4	175	..	29·67	185	133
D	Hollingbourne (Penn Court)	S. Lucy, Esq.	5	1 1	261	..	31·66	171	138
D	Maidstone (W. W., Barming)	C. H. Harden, Esq., C.E.	5	1 4	245	..	29·37	164	126
D	Wrotham Heath (Huntsman's Ldge)	G. B. Kershaw, Esq.	5	1 9	284	..	31·19	180	139
D	Maidstone (Brenchley Gardens)	T. F. Bunting, Esq., C.E.	5	0 9	49	..	29·37	165	122
D	Maidstone (Mill Street)	T. F. Bunting, Esq., C.E.	8	6 0	37	..	29·38	175	132
D	Aylesford (Forstal)	C. H. Harden, Esq., C.E.	5	1 4	20	..	28·16	168	118
D	East Malling (Blacklands)	Major C.E. Tristram	5	1 0	80	..	28·55	166	129
D	East Malling (Research Station)	The Secretary	8	1 0	127	..	27·61	165	130
	Maidstone (Allington Lock)	Mr. W. Smith	5	1 0	20	..	28·74	..	134
D	Detling (The Croft) *new g*	R. Cooke, Esq.	5	1 0	330	27·8	32·61	213	137
M	Detling (Pollhill Fields)	R. Cooke, Esq.	5	1 0	553	..	30·39	..	..
D	Trosley Pumping Station	F. L. Ball, Esq.	5	1 8	250	..	29·22	176	133
D	Chatham (Woolmans Wood)	W. Coles Finch, Esq., C.E.	5	3 0	470	..	31·40	183	131
d	Halling Pumping Station	F. L. Ball, Esq.	5	1 0	75	..	27·49	..	131
D	Chatham (Luton W.W.)	W. Coles Finch, Esq., C.E.	5	3 0	88	..	28·23	169	126
D	Rainham (Motney Hill)	J. B. Harvey, Esq.	5	1 0	28	..	24·96	156	115
D	Rochester (Deanery Gate)	Warwick Stunt, Esq.	5	1 0	50	..	24·13	167	117
D	Rochester (Knight's Place)	Miss F. H. Pye	5	3 0	320	26·0	29·02	179	135
D	Strood Waterworks	(+A) W. Law, Esq., C.E.	5	1 0	112	..	26·38	176	124
	5.—THAMES—Darent & C. 256 sq. mi.								
d	Westerham Town	Met. Water Board	5	1 0	380	..	33·12	(187)	(137)
D	Westerham Hill Pumping Stat.	Met. Water Board	5	1 0	539	..	34·44	200	136
D	Sundridge Rectory	Rev. C. C. Gosselin	5	1 0	280	..	30·97	181	139
D	Sundridge Pumping Stn.	Met. Water Board	5	1 0	270	..	30·19	176	137
M	Sevenoaks (Tonbridge Rd. Res.)	F. Vallins, Esq.	5	1 6	556	..	29·52	..	..
D	Sevenoaks (Speldhurst Close)	H. Willoughby Ellis, Esq.	5	1 0	470	..	30·30	194	149
D	Sevenoaks (Knole Park)	E. Stubbs, Esq.	5	1 0	500	..	30·82	186	137
d	Tatsfield (Betsoms Hill)	Met. Water Board	5	0 7	820	..	35·84	(215)	(148)
M	Seal (Oak Bank Reservoir)	F. Vallins, Esq.	8	1 0	550	..	30·88	..	..
M	Seal (St. Lawrence Reservoir)	F. Vallins, Esq.	8	1 0	665	..	31·18	..	..
M	Seal (Kemsing Pumping Stat.)	F. Vallins, Esq.	5	1 0	292	..	30·94	..	..

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—THAMES—Darent & C.—(*con.*).								
D Sevenoaks (Chevening Gardens).	Mr. J. C. Sutton	5	1 0	360	..	34·60	189	141
D Knockholt (Kent Waterworks)	Met. Water Board	5	1 0	785	29·9	33·57	174	151
D Biggin Hill (Aerodrome)	The Meteorological Office	8	1 0	567	..	31·90	196	136
D Fairseat (Fairseat House)	Col. W. Pitt, C.M.G.	5	1 0	670	..	35·76	201	167
D Chelsfield (Hewitts)	W. A. Waring, Esq.	5	4 0	476	..	29·59	178	127
Keston (Forest Lodge)	W. H. Dodgson, Esq.	5	0 6	450	..	33·98	..	..
D W. Wickham (Wickham Court)	Sir Stephen Lennard, Bt.	5	1 0	300	..	33·31	175	138
D Eynsford Pumping Station	Met. Water Board	5	1 0	100	..	27·27	154	122
D Eynsford Hill	Arthur Mee, Esq.	5	1 0	358	..	29·26	186	129
D Orpington (Kent Waterworks)	Met. Water Board	5	1 0	220	..	30·71	177	135
Crockenhill (Wested Farm)	A. T. Miller, Esq.	5	1 6	331	..	27·66	..	..
D Bickley (Farrants)	Miss Chalmers	5	1 0	250	..	29·36	171	127
Bromley (Sundridge Avenue)	Dr. H. Wynne Thomas	5	1 0	200	..	28·01	..	..
D Bromley	The Borough Engineer	5	1 0	213	..	27·13	178	132
D Bromley (Plaistow Lane)	Col. E. Satterthwaite, C.B., V.D.	5	0 9	234	*25·9*	29·27	178	128
D Beckenham (Croydon Road)	The Surveyor	8	1 0	110	..	35·62	171	139
d Penge (Recreation Ground)	H. W. Longdin, Esq., C.E.	5	1 1	122	*25·2*	29·00	..	125
D Anerley (Oakfield Road)	Miss S. Stannard	5	1 5	..	..	27·41	160	124
D Chislehurst (Hawkwood)	Miss M. C. Edlmann	5	1 0	300	..	27·83	187	124
Chislehurst (Holbrook Lane)	W. P. Jones, Esq.	5	1 0	325	..	29·46	..	..
D Chislehurst (Scadbury Park)	Mr. B. Orchard	5	1 0	250	..	28·09	172	131
D Swanley (Horticultural College)	Miss H. G. Mitchell	5	1 0	155	..	24·89	170	120
D Southfleet (Kent Waterworks)	Met. Water Board	5	1 0	82	..	23·73	177	117
D Wilmington (Kent Waterworks)	Met. Water Board	5	1 0	25	..	23·12	173	121
D Dartford (West Hill)	Mr. J. Taylor	5	1 3	100	..	25·14	154	119
D Dartford (Tower Road)	C. O. Hunt, Esq.	5	0 6	125	..	24·70	177	119
D Stone (City of Lond. Ment. Hosp.)	J. Gower, Esq.	5	1 0	200	..	21·77	166	122
D Dartford (Sewage Works)	The Resident Engineer	5	1 0	14	..	22·71	167	124
D Erith Sanatorium	Erith U.D.C.	5	1 0	182	..	23·77	159	117
D Erith (Sewage Works)	Erith U.D.C.	5	1 0	13	..	21·51	155	118
D Erith (St. Joseph's Convent)	Erith U.D.C.	5	1 0	213	..	24·34	165	123
D Higham Waterworks	C. H. Clark, Esq.	8	1 0	141	..	27·43	191	126
D Erith (Crossness)	London County Council	14	0 6	16	..	21·75	159	118
SUSSEX. (Area, 1,458 sq. mi.								
1.—LAVANT & C. 175 sq. mi.								
D Selsey (Large Acres) *Field*	E. Heron Allen, Esq., F.R.S.	5	1 0	21	..	30·09	184	139
D Aldwick (Greenways)	D. S. Hancock, Esq.	5	1 0	25	..	28·66	177	127
D Bognor Regis (Waterloo Square)	The Town Clerk	8	1 0	20	25·9	29·47	185	134
D Bognor Regis (Albert Road)	W. L. Guermonprez, Esq.	8	1 0	17	..	28·94	189	135
D North Mundham Vicarage	J. Outram, Esq.	5	0 9	0	..	31·64	190	142
D Colworth (Manor Farm)	Harold W. Drewitt, Esq.	5	4 6	18	*27·7*	28·47	172	133
D Merston (Abelands)	Miss V. Kennard	5	0 6	24	..	30·32	174	134
D Bosham (Cobnor)	Major S. W. P. Beale	5	1 6	12	..	30·11	182	126
D Barnham (Downview Road)	P. A. Bisset, Esq.	5	1 0	20	..	31.43	185	131
D Chichester (Kingsham Farm) (R)	W. Lawson, Esq.	8	0 10	35	..	32·58	209	138
D Chichester (Westgate)	G. Ashley Tyacke, Esq.	8	1 0	40	28·7	31·12	182	138
D Chichester (West Street)	Dr. Walter Dick	5	1 0	40	..	29·79	166	121
d Chichester (County Hall)	Stanley Morris, Esq.	5	1 0	45	..	31·75	..	..
d Chichester (Oakwood House)	Mrs. Baring Du Pre	5	1 0	101	..	30·62	..	135
D Chichester (West Broyle Gdns.)	Mrs. Weller-Poley	5	1 4	107	..	31·66	172	139
D Emsworth (West Bourne)	late Rev. L. B. Birkett	5	1 0	30	*30·9*	33·10	202	144
D Boxgrove (Priory Farm)	S. J. K. Eames, Esq.	5	1 4	90	..	31·02	160	134
D Funtington House	J. A. Greenwood, Esq.	5	1 0	95	..	32·91	182	136
D West Stoke Rectory	Rev. Preb. W. F. Shaw	5	1 0	176	..	33·84	160	139
D Chichester (Goodwood Gardens)	Duke of Richmond&Gordon	5	1 3	133	..	36·07	213	152
D Emsworth (Stansted Park)	Earl of Bessborough	5	2 6	140	..	38·98	229	168
D Emsworth (Watergate House)	W. M. Christy, Esq.	5	1 0	222	..	35·73	193	144
D West Dean Park	Mr. W. H. Smith	5	1 0	190	..	39·13	180	148
D Chilgrove House	E. L. Woods, Esq.	5	1 0	266	..	37·01	175	138
D Compton (Compton House)	Miss K. B. Langdale	5	1 0	263	36·6	37·78	178	147

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—ARUN. 285 sq. mi.								
D	Littlehampton (Met. Station)	Thomas Benson, Esq.	5	1 0	27	..	31·45	174	137
d	Rustington (Bracondale Nurs.)	J. Muir, Esq.	5	0 10	30	..	28·86	..	..
D	Lyminster Vicarage	Rev. Dr. S. P. Duval	5	1 0	20	..	29·66	175	135
D	Arundel (Cross Bush)	Miss M. Orme	5	1 3	125	..	32·88	194	139
D	Patching (Dulaney House)	Mr. E. J. Burch	5	0 9	125	..	36·13	173	151
d	Patching Farm	Michael Drewitt, Esq.	5	1 0	180	30·8	34·37	162	140
	Harting (Down Place)	R. G. Blackwell, Esq.	5	1 2	401	..	40·59	178	147
D	Storrington (Badgercroft)	P. Herington, Esq.	5	6 0	250	..	38·34	162	142
D	Storrington Rectory	Mrs. Faithfull	5	1 1	..	..	35·58	169	145
	Bignor	Major G. B. Hill	5	0 10	175	..	39·34	..	..
d	Pulborough (Nutbourne Manor)	H. M. Baker, Esq.	5	1 0	100	..	30·23	..	..
D	Pulborough (Codmore Hill)	Rev. C. Ash	5	2 0	165	..	33·24	208	164
D	Fittleworth Rectory	Rev. A. C. Lucey	5	1 9	135	..	31·72	182	143
d	Selham (Selham House)	C. C. Lacaita, Esq.	5	1 0	115	..	32·99	..	126
D	Petworth Park Gardens	Lord Leconfield	5	1 0	182	..	33·52	189	133
D	Tillington (Westmoor)	Mrs. Randall	5	1 0	200	..	33·73	188	152
d	Midhurst (June Lane)	H. O. Purser, Esq.	5	1 0	120	..	33·44	..	..
d	Midhurst (Fairview)	Gilbert Eames, Esq.	5	1 0	..	..	34·09	..	..
d	Billingshurst (The Nook)	Chas. F. Rilot, Esq.	5	1 0	120	..	30·22	..	129
D	Kirdford (Hills Green)	L. Baker, Esq.	5	1 0	150	..	31·11	176	129
D	Liss (Hill Brow)	F. W. Beckford, Esq.	5	1 0	488	..	39·61	203	161
d	Fernhurst (Ashurst)	C. I. Blackburne, Esq.	5	1 0	280	..	34·39	..	129
D	Fernhurst (Hill Farm)	J. King, Esq.	5	0 9	426	..	38·84	198	146
D	Fernhurst (Blackdown House)	Lady Philipson Stow	5	1 0	550	..	35·39	181	147
D	Lower Beeding (The Warren)	Leicester M. Reed, Esq.	5	0 10	430	..	35·42	169	143
D	Horsham (Christ's Hospital)	Major Gabriel Green, M.C.	8	1 3	160	..	31·36	188	127
D	Horsham (Tower Hill)	C. Marsh, Esq.	5	1 0	220	..	30·22	182	135
D	Horsham (Sewage P.S.)	C. G. Atkinson, Esq.	8	1 0	118	..	30·84	184	138
D	Horsham (Wimblehurst)	Miss E. M. Allcard	5	1 0	195	30·0	32·61	168	138
	Horsham (Dunedin)	A. C. Holland, Esq.	5	1 0	220	..	32·70	..	..
D	Rusper (The Nunnery)	Sir Cecil J. B. Hurst, G.C.M.G.	5	1 6	260	..	34·49	177	140
	3.—ADUR & C. 237 sq. mi.								
D	Rottingdean School	Mr. T. A. Sandalls	5	1 0	120	..	30·60	173	131
D	Rottingdean (Hillside)	Admiral H. J. L. Clarke, C.B.E.	5	1 0	60	..	31·02	156	125
D	Worthing (Beech House Pk.) (+A)	Dr. R. H. Wilshaw	8	1 0	35	27·5	28·31	169	127
D	Brighton (Old Steyne)	The Medical Officer of Health	5	1 0	32	28·1	29·55	155	125
D	Portslade (Midways)	E. C. Smith, Esq.	5	1 0	30	..	31·16	158	134
D	Hove (Park House)	Guy Michell, Esq.	5	1 0	120	..	32·12	182	138
D	Hove (Park View)	Chas. Modlen, Esq.	5	0 11	145	..	31·42	163	132
D	Brighton (Dyke Road)	R. A. Penny, Esq.	5	1 0	240	..	31·29	160	135
D	Lancing College	The Headmaster	5	1 0	120	..	29·78	168	142
D	Brighton W. W. (Goldstone Bot.)	A. B. Cathcart, Esq., C.E.	8	1 0	142	..	29·89	173	132
D	Brighton W.W. (Lewes Road)	A. B. Cathcart, Esq., C.E.	8	1 0	140	29·9	36·38	174	136
D	Brighton W.W. (Shoreham)	A. B. Cathcart, Esq., C.E.	8	1 8	12	..	32·39	180	140
D	Brighton W.W. (Mile Oak)	A. B. Cathcart, Esq., C.E.	8	1 3	166	..	32·59	167	134
D	Brighton W.W. (Race Hill Res.)	A. B. Cathcart, Esq., C.E.	8	1 3	469	..	35·83	174	135
D	Falmer (Brighton W.W.)	A. B. Cathcart, Esq., C.E.	8	1 4	202	..	34·79	184	139
D	Patcham (Brighton W.W.	A. B. Cathcart, Esq., C.E.	5	1 1	206	..	34·04	168	135
D	Bramber (Burletts)	Hatton G. Sugden, Esq.	5	1 0	75	..	41·26	200	142
D	Washington Vicarage	Rev. A. H. S. Pattrick	5	1 0	251	..	38·41	178	139
D	Ditchling (Neston)	J. Brown, Esq.	5	1 1	170	..	38·83	179	142
D	Hassocks (Wilmington Lodge)	C. T. Agar, Esq.	5	1 0	200	..	37·25	171	139
D	Hassocks (The Croft)	Harold Taylor, Esq.	5	1 0	200	..	39·21	170	141
d	Keymer	J. Francis Jupp, Esq., C.E.	5	1 0	..	..	38·66	..	133
D	Burgess Hill (Donisthorpe)	Mrs. A. Malden	5	1 6	190	..	35·96	171	140
D	West Grinstead (Danefold)	Miss T. Gaisford	5	1 0	130	..	31·32	174	139
D	Cuckfield (Henmead Hall)	Mrs. Maxwell Campbell	5	3 0	365	..	35·25	192	144
D	Billingshurst (Duncan's Farm)	Miss Edith Beck	5	1 0	130	..	32·93	176	140
D	Slinfold (Elmhurst Farm)	Elmhurst Fmg. & Trdg. Co.	5	0 10	200	..	30·40	182	133

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—OUSE.—224 sq. mi.								
D	Seaford (Bowden House School)	J. F. Thomas, Esq.	5	1 0	190	..	31·44	165	126
D	Seaford (Newlands)	T. Davys Manning, Esq.	5	1 0	100	..	33·83	161	126
d	Seaford (Southdown School)	C. W. Perfect, Esq.	5	1 6	120	..	(31·52)	..	..
D	Newhaven (Poverty Bottom W.W.)	F. B. Lumsden, Esq.	8	1 0	51	..	34·38	176	135
d	Lewes (Littledene)	Mr. J. R. Howard	8	0 11	58	..	37·87	..	..
D	Lewes W. W. (Kingston)	J. T. P. Johnston, Esq.	8	1 3	13	..	40·37	211	140
D	Ringmer (Ryngmer Park)†	G. Elliott Sealy, Esq.	5	1 0	100	..	35·51	183	138
D	Barcombe (The Gables)	L. S. F. Woodhead, Esq.	8	1 0	100	..	36·90	193	135
d	East Hoathly (Halland Park)	R. Shanks, Esq.	5	1 6	250	..	33·36	..	..
	Framfield (High Cross)	Maj. R. L. Thornton, C.B.E.	5	1 0	195	..	33·98	..	..
D	Newick (Holly Grove)	Major A. K. Slessor	5	0 10	150	..	36·01	166	135
D	Haywards H. (Paddockhall Rd.)	L. E. Hervey, Esq.	5	1 0	260	..	34·63	178	138
	Buxted (Strawberry Hall)	C. Rintoul, Esq.	5	1 0	180	..	33·51	170	..
D	Mayfield (Five Ashes)	Miss Emily Aston	5	1 1	300	..	35·62	207	143
D	Lindfield (The Common)	R. H. Robertson, Esq.	5	1 6	250	..	36·80	181	140
D	Uckfield (Fairwarp)	Col. A. E. Barchard	5	0 10	475	..	37·54	184	151
D	Oldlands Hall (R)	Sir B. Eckstein, Bart.	8	3 0	400	..	42·57	202	148
d	Horsted Keynes (Holy Well P.S.)	F. Martin, Esq., C.E.	8	1 9	124	..	36·28	..	147
D	Ardingly (Lywood House)	G. Forrester Scott, Esq.	5	0 9	240	..	35·61	205	140
D	Ardingly (Wakehurst Place)	G. W. E. Loder, Esq.	8	1 3	437	..	36·76	196	139
D	Horsted Keynes (Birchgrove)	Miss G. C. Price-Davies	5	1 0	400	..	34·20	200	141
D	Balcombe (Lullings)	Mrs. M. Holland	5	1 0	348	..	37·48	190	145
D	Balcombe (The Gables)	Mr. G. J. Warren	8	1 3	358	..	37·70	188	153
D	Balcombe (Stockcroft)	Dr. R. Newton	5	1 1	341	..	35·45	182	139
d	Balcombe (Waterworks)	F. Martin, Esq., C.E.	8	1 0	467	..	35·09	..	139
D	Balcombe (Highley Manor)	Mr. B. T. Brooks	8	1 6	420	..	35·92	187	146
D	West Hoathly (Stonelands)	J. Godwin King, Esq.	5	1 0	450	..	34·73	186	144
	5.—CUCKMERE & C. 189 sq. mi.								
D	Eastbourne (West Lodge)	Miss E. K. Beauford	5	1 0	120	..	34·69	179	135
D	Eastbourne (Wilmington Sq.) (+A)	Dr. W. G. Willoughby	5	1 0	35	30·7	34·95	179	131
D	Eastbourne (Motcombe Gdns.) (A)	Major L. Roseveare, C.E.	11	1 7	59	..	36·06	177	128
D	Eastbourne (Arundel Road)	Miss G. J. Woodd	8	1 6	86	..	36·64	170	135
D	Friston	A. Wilkins, Esq.	8	1 0	104	..	34·34	184	128
D	Jevington	A. Wilkins, Esq.	8	1 0	274	..	36·39	155	141
D	Litlington	A. Wilkins, Esq.	8	1 0	19	..	35·32	153	130
D	Willingdon Sewage Farm	R. W. Fovargue, Esq.	5	1 0	24	..	37·56	151	131
D	Pevensey Pumping Station	R. W. Fovargue, Esq.	5	1 0	12	..	33·10	159	124
D	Pevensey Bay Pumping Station	R. W. Fovargue, Esq.	5	1 0	7	..	31·92	162	124
D	Bexhill (Egerton Park)	H. J. Sargent, Esq.	8	1 0	12	..	32·91	158	129
D	St. Leonards (Gensing Gardens)	Town Clerk	8	1 0	178	28·4	37·07	217	140
D	St. Leonards (Thorndene)	Miss Agnes E. Tait	5	1 0	190	..	35·28	(179)	(144)
D	Hailsham (North Street)	R. Matthews, Esq.	5	1 0	105	..	35.85	184	135
d	Hurstmonceaux Place	H. A. James Esq.	5	1 1	83	..	32·53	..	130
D	Hailsham (Magham Down)	E. M. Bear, Esq.	5	1 0	90	..	33·93	171	136
D	Hastings (Newgate)	S. Little, Esq., C.E.	8	1 0	240	..	33·13	159	131
D	Hastings (Halton Reservoir)	S. Little, Esq., C.E.	5	1 0	300	..	34·47	158	133
D	Hastings (Fairlight Reservoir)	S. Little, Esq., C.E.	5	1 0	500	..	33·67	152	132
D	Battle (Forewood W.W.)	S. Little, Esq., C.E.	5	1 0	30	..	36·38	173	138
D	Battle (Campfield)	Lt.-Col. G. A. Yool, D.S.O.	5	1 0	179	..	38·33	189	160
D	Hellingly (Burlow)	G. Berry Hamlin, Esq.	5	1 0	209	..	33·53	207	143
D	Horeham Road (Coxlow)	Miss P. C. Harrison	5	1 0	260	*32·2*	32·47	198	137
D	Horeham Rd. (Hollycroft Cott.)	J. Hamlin, Esq.	5	1 0	300	*35·2*	35·42	196	136
D	Horeham Road (Holmwood)	Rev. G. T. Maw	5	1 0	380	..	33·77	167	140
D	Heathfield (The White Cottage)	J. F. Leigh Clare, Esq.	5	1 0	500	..	33·52	187	145
	6.—ROTHER. 194 sq. mi.								
D	Battle (The White Cottage)	Rev. E. J. Morgan	5	1 0	320	..	40·16	197	142
d	Brede Pumping Station	S. Little, Esq., C.E.	8	1 0	32	..	34·48	..	125
D	Battle (Netherfield)	Thos. W. C. Terry, Esq.	5	1 0	420	..	38·65	200	147
d	Udimore (The Wick)	Major R. P. Mair	8	1 0	92	*28·7*	32·20	..	128
D	Rye (The Point)	W. Gay, Esq.	5	1 0	120	..	35·28	186	144

† Formerly known as Park House.

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft*	*in.*	*in.*		
6.—ROTHER—(*con.*).								
D Brightling Park	T. P. Tew, Esq.	5	1 0	545	..	38·24	200	146
D Peasmarsh (Woodside)	A. W. Rickards, Esq.	5	0 8	100	..	36·93	187	142
Beckley (Little Harmers)	B. E. de N. Ramus, Esq.	5	1 0	160	..	39·08	215	150
D Heathfield (Barklye)	Late Mr. J. Masson	5	1 0	500	..	38·98	166	153
d Northiam (Great Dixter)	N. Lloyd, Esq., O.B.E.	8	1 0	209	..	33·85	..	128
D Ticehurst (Stonegate)	W. J. Wheeler, Esq.	5	1 0	230	..	40·62	230	155
7.—MEDWAY. 117 sq. mi.								
D Rotherfield (Horsegrove Fm.)	F. W. Shaw, Esq.	5	1 0	528	..	40·52	192	142
D Crowborough (Tudor Lodge)	F. Holroyd, Esq.	5	1 0	620	..	39·48	196	148
D Crowborough (Jarvis Brook)	Crowborough Water Co.	5	1 0	325	..	40·03	173	148
D Crowborough (Uckfield Lodge)	Mrs. Driberg	8	1 0	796	36·0	40·53	190	156
D Crowborough (Beacon School)	R. W. Hunt, Esq.	5	1 3	750	..	41·29	204	157
D Crowborough (The Manse)	Rev. F. J. Briggs	5	1 0	730	..	42·30	208	164
D Wadhurst (Lower Cousley Wd.)	A. Wilkin, Esq.	5	1 0	416	..	34·92	186	141
d Forest Row (Wych Cross Place)	D. W. Freshfield, Esq., D.C.L.	5	1 0	600	..	36·04	..	124
D Forest Row (Hindleap Lodge)	Mr. A. Adam	5	1 6	620	..	37·21	181	154
D Forest Row (Coleman's Hatch Vic.)	Rev. H. C. B. Foyster	5	1 2	300	..	34·72	207	137
Forest Row (Charlwood Farm)	A. Hoare, Esq.	5	2 0	350	..	37·63	..	154
d E. Grinstead (Brambletye)	Major G. Larnach-Nevill	5	1 0	420	..	33·60	..	134
D Frant (Hazelhurst)	J. H. A. Love, Esq.	5	1 0	450	..	38·59	198	142
D Frant (Henley House)	Rev. E. Malden	5	1 6	440	*32·3*	37·73	197	143
d Frant (Eridge Castle)	Mr. A. Wilson	5	1 0	400	..	35·63	..	161
d Frant (Highfield)	H. S. Eeles, Esq.	5	1 0	413	..	32·76	..	..
D Groombridge (Crossways)	Capt. D. P. A. Gray	5	1 0	260	..	33·54	192	134
d Hartfield (Bolebroke)	Percy Mann, Esq.	5	1 0	150	..	32·44	..	134
D Crawley Down (The Grange)	Miss L. T. A. Buckley	5	0 9	430	..	33·35	176	125
D E. Grinstead (Brockhurst Obsy)	W. S. Franks, Esq.	8	1 0	435	*32·9*	33·69	229	145
D Wadhurst (Downgate)	Rev. E. P. Gatty	5	1 6	300	..	38·01	184	139
8.—THAMES—Mole. 27 sq. mi.								
D Turners Hill (Hill House)	Miss R. M. Ravenshaw	8	1 6	477	..	33·45	181	135
D Worth (Worth Lodge)	C. W. Nix, Esq.	5	1 0	340	*31·9*	34·62	194	136
d Crawley (The Beeches)	N. Longley, Esq.	8	1 0	220	..	32·77	..	118
9.—THAMES—Wey. 10 sq. mi.								
D Milland House	S. Thompson, Esq.	5	1 0	425	..	35·39	183	145
D Liphook (Ripsley)	W. D. Bosanquet, Esq.	5	1 0	400	..	37·24	190	157
HAMPSHIRE. (Area 1,622 sq. mi.)								
1.—ISLE OF WIGHT. 150 sq. mi.								
D St. Catherine's Point	The Chief Officer	8	1 8	150	..	31·97	189	145
d Blackgang (H.M. Coastguard)	Mr. H. W. Hawkes	5	1 0	420	..	30·83	..	..
D Ventnor (Royal National Hos.)	Miss N. G. Abercrombie	5	1 0	59	28·9	32·26	193	138
D Ventnor (Fern Bank)	A. W. Jolliffe, Esq.	5	1 5	250	..	34·41	197	144
D Godshill (Daffodil Valley Farm)	S. F. Lunniss, Esq.	5	1 0	195	..	38·91	181	144
D Shanklin (Pomona Road)	The Town Surveyor	8	1 0	199	..	37·62	186	149
d Brighstone Rectory	Rev. E. W. Silver	5	1 0	140	..	35·55	..	..
d Brighstone (Pitt Place)	A. A. H. Wykeham, Esq.	5	1 7	200	..	30·37	..	..
D Sandown (Sandham Gds.)	The Surveyor	8	1 0	13	..	34·96	230	148
D The Needles (Golf Club)	Mrs. Newnham	5	1 0	300	..	29·84	184	130
D Totland Bay (Aston House)	J. Dover, Esq.	8	1 0	140	28·5	31·15	177	135
D Freshwater (Pumping Station)	J. Dover, Esq.	8	1 0	10	..	32·18	185	143
D Newport (The Mall)	J. F. Jackson, Esq.	5	1 0	48	..	36·81	185	151
D Ryde (Perivale)	Major E. C. Murray	5	1 3	193	..	35·64	197	142
D Ryde (West Street)	W. H. Salter, Esq.	5	1 0	170	..	33·07	204	152
D Ryde (Buckland Grange)	Lt.-Col. Sir Hugh Daly	5	1 0	90	..	33·55	232	155
D Ryde (Esplanade Gardens)	B. F. Holness, Esq., C.E.	5	1 9	13	..	30·71	189	145
D Wootton (Fernhill)	Major C. G. Brodie, M.C.	8	1 0	118	..	35·61	189	148
D Wootton (Oak Lawn)	R. W. Hutton, Esq.	5	0 9	80	..	36·39	203	148
D Cowes W.W. (Broadfields)	J. W. Webster, Esq., C.E.	5	1 0	161	..	31·56	183	147
D Osborne	Maj.-Gen. Sir S. G. Goise-Moores, K.C.B.	5	1 0	127	..	36·95	190	154
D East Cowes (Spring Hill)	Sir George Sheddon	5	1 0	123	..	30·15	174	136

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—STOUR. 32 sq. mi.								
D	Bournemouth (East Cliff)	Dr. F. G. Penrose	8	1 0	120	..	26·28	181	137
D	Bournemouth (Rodney House)	S. Hyla Greves, Esq.	5	1 0	145	..	29·87	179	140
D	Bournemouth (Vale View)	C. Dales, Esq.	5	1 0	145	31·5	30·79	192	148
D	Bournemouth (East Avenue)	J. E. Hewitt, Esq.	5	1 0	142	..	30·10	181	145
D	Bournemouth (Talbot Woods)	H. Constantine, Esq.	5	1 0	110	..	31·19	180	144
D	Bournemouth (Howard Road)	E. D. Shawfield, Esq.	5	1 0	117	..	31·75	195	147
D	Christchurch (Air Compressing Sta.)	Borough Surveyor	5	0 10	6	..	26·45	144	116
D	Christchurch (Heron Court)	The Earl of Malmesbury	5	1 0	25	..	34·31	180	154
D	Ringwood (Athol Lodge)	S. O. Ferry, Esq.	5	1 0	60	..	31·78 ?	202	147
	3.—EAST AVON & C. 114 sq. mi.								
D	Christchurch (Harrow Lodge)	R. C. Bacon, Esq.	8	1 0	135	..	33·30	198	144
D	Ringwood (Bisterne)	Major J. D. Mills	8	1 2	45	..	35·52	200	158
D	Ringwood (Ashley)	Miss M. E. Williams	5	1 0	100	..	38·46	221	165
D	Ringwood (Crow Hill)	Mrs. H. F. Rawstorne	5	1 0	250	..	34·45	202	157
	Ringwood (Grey Friars)	R. W. Christy, Esq.	5	1 0	50	..	32·21	..	130
D	Fordingbridge (Cuckoo Hill)	Heywood Sumner, Esq.	5	1 0	150	..	36·42	197	163
D	Fordingbridge (Dockens)	E. W. Poore, Esq.	8	1 0	140	..	32·67	191	140
D	Fordingbridge (Oaklands)	S. B. Rake, Esq.	8	1 0	135	31·7	36.14	215	145
D	Breamore House	Mr. J. Cole	5	1 0	120	..	32·28	178	139
	4.—TEST & SOLENT. 551 sq. mi.								
D	Milford-on-Sea (Salt Grass)	A. C. G. Heygate, Esq.	5	1 0	6	..	31·71	172	142
d	Milford-on-Sea (Rollrights)	Dr. A. Wood	5	1 0	50	..	28·30?	(178)	(142)
D	Lymington (The Salterns)	P. A. Ouvry, Esq.	5	1 0	4	..	30·98	185	144
D	Lymington (Woodmancote)	Major G. M. Harding	5	1 0	70	..	31·67	191	144
D	Sway (Gordleton)	W. F. Wright, Esq.	5	1 6	105	..	32·92	182	146
D	Sway (Sway Wood)	J. Dixon, Esq.	5	1 0	140	..	35·38	182	158
D	Boldre (Battramsley Close)	Dr. H. A. Des Voeux	5	1 1	119	..	35·62	200	159
d	Exbury	L. N. de Rothschild, Esq.	5	1 0	85	..	29·86	..	..
D	Brockenhurst (Weirs End)	Col. C. Mansel-Jones, V.C.	5	1 0	45	..	36·74	185	169
D	Calshot (Seaplane Station) (+A)	The Meteorological Office	8	1 0	8	25·5	29·66	191	136
D	Beaulieu (Moonhills Gate)	Lt.-Comdr. A. Betts-Brown	5	1 0	130	..	33·67	222	147
D	Burley (Sandys)	G. Mason, Esq.	5	1 0	150	..	35·73	190	156
D	Burley (Burley Lodge)	L. S. Osmaston, Esq.	6	0 11	75	..	35·39	183	148
d	Fawley (Cadland Park)	Mr. L. Smith	8	4 6	52	..	31·01	..	134
D	Lyndhurst (Deerhurst)	Ralph Paget, Esq.	5	1 6	250	..	35·76	173	149
D	Lyndhurst (Allum Green)	Miss S. R. Fenwick	5	1 0	125	..	38·37	188	163
D	Hythe (Dibden House)	Lt.-Col. H. W. Kettlewell	5	1 0	85	..	37·99	194	156
D	Cadman (Canterton Manor)	Miss Jeffreys	5	1 0	125	..	36·30	199	158
D	Bartley (The Nurseries)	G. H. Dalrymple, Esq.	..	..	60	..	35·41	184	157
D	Totton (Shorne Hill)	Mrs Rennie	5	1 0	130	..	36·59	194	163
D	Southampton (East Park)	Director Ordnance Survey	8	1 0	64	30·9	35·64	193	151
D	Southampton (Shirley)	S. G. Stanton, Esq., C.E.	5	1 0	70	..	33·57	179	148
M	Southampton Common Res.	E. C. Rodda, Esq., C.E.	5	1 0	193	..	33·48	..	..
D	Romsey (Embley Gardens)	J. J. Crosfield, Esq.	5	1 0	130	..	31·95	181	140
D	Romsey (Harefield)	Lt.-Col. W. J. Langford	5	1 0	120	..	33·01	180	161
d	Melchet Court	Mr. W. Petty	5	3 0	207	..	31·98	..	131
D	Romsey (Timsbury Manor)	A. R. Wilson-Wood, Esq.	5	0 10	75	..	31·90	171	140
D	Romsey (Timsbury P.S.)	E. C. Rodda, Esq., C.E.	8	1 8	96	..	31·41	189	146
D	Stockbridge (Houghton Lodge)	Mr. G. Morris	5	1 0	112	..	30·62	153	140
D	Crawley (Chilbolton Down)	R. Hargreaves, Esq.	8	1 2	350	..	30·35	190	132
D	Micheldever (School House)	W. Geo. Gould, Esq.	5	1 0	280	..	29·47	194	139
D	Wonston (Upton House)	H. J. Gardiner, Esq.	5	1 0	229	..	30·25	200	138
D	Andover (Sewage Works)	W. C. Jerome, Esq.	8	1 0	182	..	28·51	185	138
D	Andover (Hatherden)	E. E. Leader, Esq.	5	1 0	350	..	29·99	181	139
D	Fyfield Rectory	Rev. E. K. R. Reynolds	5	1 3	255	..	28·03	182	133
D	St. Mary Bourne (Bournside)	Prof. C. V. Boys, F.R.S.	5	1 0	300	..	28·46	187	140
	St. Mary Bourne (Spring Hill)	Mrs. H. A. Boys	5	1 4	300	..	27·13	..	..
D	Worting (Manydown Park) (R)	Col. A. S. Bates, D.S.O.	8	4 0	415	..	34·86	199	149

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—TEST & SOLENT—(*con.*).								
	Hurstbourne Tarrant (Rookery)	R. E. C. Burder, Esq.	5	1 0	331	..	31·15	..	..
D	Whitchurch (Dunley Manor)	Sir Alfred Herbert	5	1 0	500	..	30·23	182	136
D	Vernham Dean (Rowe House)	Mrs. E. H. Gamble	5	1 0	620	..	33·03	188	148
D	Linkenholt Manor	R. Dudley, Esq.	5	4 0	700	..	30·62	182	151
	5.—ITCHEN & SPITHEAD. 422 sq. mi.								
D	Alverstoke (Monckton House)	Major J. Blake	5	1 3	15	..	32·07	190	138
D	Alverstoke (Glencoe)	J. G. Thomas, Esq.	5	1 3	20	..	30·73	191	139
D	Gosport	Borough Surveyor	8	1 0	30	..	32·31	159	139
D	Portsmouth (Victoria Park)	Dr. A. Mearns Fraser	5	1 0	15	27·7	31·05	179	138
D	Hayling Island (Richmond Ho.)	E. S. McEuen, Esq.	5	1 2	16	..	27·47	169	133
D	South Hayling (C. of E. School)	H. J. Earney, Esq.	5	1 6	10	..	27·79	169	131
D	Lee-on-Solent (Edinburgh Ho. Sch.)	Trevor J. Tatham, Esq.	5	1 0	15	..	31·86	177	145
d	Hook-cum-Warsash	E. M. Biggs, Esq.	5	1 0	50	..	31·13	..	134
D	Portchester (Noel Cottage)	Miss R. M. Frost	5	1 0	10	..	29·92	164	130
D	Farlington (Pump. Stn.) *new g.*	D.Halton Thomson,Esq.,C.E.	5	1 0	78	..	30·69	181	142
	Farlington (Filter Works) *old g.*	D.Halton Thomson,Esq.,C.E.	8	1 0	157	..	29·22	..	..
D	Farlington (Filter Works) *new g.*	D.Halton Thomson,Esq.,C.E.	5	1 0	157	..	30·70	188	139
D	Havant (Portsmouth W.W.)	D.Halton Thomson,Esq.,C.E.	5	1 0	25	*26·7*	30·59	181	142
D	Havant (Warblington)	F. D. Crossley, Esq.	8	1 0	22	..	28·65	183	137
d	Havant (Wade Court)	W. E. Sotheby, Esq.	8	1 0	17	..	29·29	..	..
D	Fareham (Fareham House)	W. S. Stevenson, Esq., M.D.	5	1 6	30	..	32·74	161	132
D	Fareham (Roche Court)	Admiral Sir W. De Salis	5	1 0	103	..	34·88	197	144
D	Netley (Lake House)	Miss Pennington	8	1 0	54	..	35·54	192	150
D	Itchen Sewage Works	S. G. Stanton, Esq., C.E.	5	1 0	..	..	33·84	176	145
D	Cowplain (Forest View)	H. C. Pearson, Esq.	5	5 0	222	..	29·89	184	134
d	Wickham (The Lower House)	M.-Gn.Sir C.H.Powell,K.C.B.	5	1 4	100	..	33·96	..	140
D	Wickham (Park Place) (R)	Major A. F. Clifford	8	1 0	150	..	33·26	176	139
D	Southampton (Portswood)	S. G. Stanton, Esq., C.E.	5	1 9	10	..	34·15	177	142
	Botley (Brook House)	Mrs. Beckett Powell	5	1 0	45	..	38·13	..	..
D	Botley (Botley Hill)	Lady Jenkyns	5	1 6	36	..	37·40	192	145
	Botley (Uplands Farm)	Wilmot H. Yates, Esq.	5	1 0	60	..	39·69	197	151
D	Curdridge (Kitnocks House)	Major C. F. Randolph	5	1 0	185	..	36·98	222	141
D	Swanmore (Holywell House)	Mrs. M. Portal	5	1 6	175	..	35·74	191	154
D	Soberton (Mislingford)	E. T. Hildred, Esq., C.E.	5	1 0	136	..	35·40	182	138
D	West End (Oaklands)	Capt. P. C. Pearson, R.N.	5	1 0	45	..	35·33	187	150
D	Bishops Waltham (Park Ho.)	A. F. Hardy, Esq.	5	1 3	170	..	34·15	192	143
D	Swanmore House	W. H. Myers, Esq.	5	1 6	395	..	38·61	183	152
D	Droxford (Uplands)	Miss A. M. Bridge	5	1 0	279	..	39·80	208	157
D	Droxford (Fairfield House)	H. Hamilton Bridge, Esq.	5	0 9	254	..	39·03	210	165
D	Petersfield (Ditcham Park)	C. J. P. Cave, Esq., J.P.	8	1 0	555	..	38·07	200	141
D	Otterbourne W.W.	E. C. Rodda, Esq., C.E.	5	1 0	113	..	31·74	195	142
D	Owslebury Vicarage	G. W. W. Pierce, Esq.	5	1 1	376	..	30·94	193	149
D	Twyford (Pumping Station)	E. C. Rodda, Esq., C.E.	8	1 9	139	..	32·17	188	148
D	Twyford (Mallards Close)	G. R. Marsh, Esq.	5	1 0	153	..	32·43	204	151
	East Meon (Burnside)	H. A. Gilmour, Esq.	5	1 5	..	..	38·82	..	..
D	Winchester (Shawford)	J. A. Rooke, Esq.	5	1 0	250	..	32·51	191	145
D	Hursley (Merdon Manor)	Capt. C. J. R. Cooper	5	1 0	360	..	31·94	170	144
D	Hursley Park	Sir G. A. Cooper, Bart.	8	1 0	240	..	31·76	187	140
D	Compton (Kennington)	J. Durst, Esq.	5	1 1	250	..	31·67	187	144
d	Compton (Compton Close)	A. M. Heathcote, Esq.	5	0 10	250	..	30·20	..	..
D	West Meon (Westwood)	Major G. E. Galbraith	5	1 5	470	..	39·03	220	156
W	Kilmeston Manor	W. J. Heathcote, Esq.	5	1 0	323	..	35·54	..	..
	Petersfield (Broadhanger)	Mrs. R. M. Caulfield	5	1 0	730	..	40·07	181	..
D	Winchester (St. Cross)	G. M. Mathews, Esq.	5	1 0	135	..	33·03	198	152
D	Winchester (High Street)	Kenneth E.N. Williams,Esq.	5	1 0	200	..	32·72	205	147
D	Winchester (East Hill)	Mrs. E. Wilde	5	1 0	256	..	29·25	215	145
D	West Tisted Manor	Capt. Nelson Zambra, M.C.	5	1 3	650	..	35·93	172	140
D	East Tisted (Rotherfield Park)	Capt. J. B. Scott	5	1 0	550	..	37·14	172	149
d	Ovington Rectory	Rev. H. L. Atkins	5	1 0	221	33·2	(35·27)	..	..
D	Alresford (Penn's Grammar Sch.)	G. T. McKay, Esq., M.Sc.	5	1 0	642	..	3·352	207	141

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	5.—ITCHEN & SPITHEAD—(*con.*).								
D	Itchen Abbas (Chilland)	W. J. Arnold, Esq.	5	1 3	200	*32·7*	32·99	216	152
D	Old Alresford (The Gables)	A. E. Broad, Esq.	5	1 0	300	..	31·10	179	154
D	Worthy Down (Aerodrome) (+A)	Meteorological Office	8	1 0	275	..	30·75	188	135
	6.—ARUN. 32 sq. mi.								
d	Petersfield (Weston)	Capt. P. W. Seward	5	1 0	330	..	43·42	..	153
	Petersfield (Monks Barn)	F. G. Padwick, Esq.	5	1 3	300	..	39·13	190	146
D	Petersfield (Tilmore)	L. J. Tatham, Esq.	5	1 0	250	..	37·29	202	142
D	Petersfield (Stoner Hill) (+A)	C. J. P. Cave, Esq., J.P.	5	1 0	748	..	42·77	198	156
D	Liss (Easton)	Miss E. Barton	5	1 0	500	..	38·04	191	161
D	Liss (Heathmount)	R. A. Bosanquet, Esq.	5	1 3	490	..	36·46	196	148
D	Liss (Kippences)	Rev. W. A. H. Thorold	5	0 9	250	..	39·20	191	152
D	Liss (Hawkley Hurst)	T. Clive Davies, Esq.	5	0 11	422	..	41·15	208	155
D	Greatham (Manor House)	Miss I. L. Coryton	5	1 0	260	..	36·25	186	148
D	Greatham (Le Court)	Sir Heath Harrison, Bart.	5	0 9	350	..	39·70	199	155
	7.—THAMES—Wey. 92 sq. mi.								
D	Newton Valence Vicarage	Rev. A. C. Maclachlan	5	1 0	586	..	35·31	218	149
D	Newton Valence (Shotters)	Major W. H. Chawner	5	1 2	600	..	35·07	194	149
D	Newton Valence Place (R)	Rear-Adm. E. Jervoise, C.B.E.	8	1 5	615	..	34·49	212	159
D	Selborne (The Wakes)	Mrs. Bibby	5	1 0	400	..	38·69	203	155
D	Grayshott	Mrs. Lyndon	5	1 0	661	*33·2*	35·73	201	145
	Headley (Hartfield)	Sir S. Renshaw, Bart.	5	1 0	280	..	33·79	..	..
D	Alice Holt Forest	Office of Woods	8	1 0	264	..	32·14	197	144
D	Upper Froyle	Lendon Bell, Esq.	5	1 0	390	..	33·30	167	132
	8.—THAMES—London. 164 sq. mi.								
d	Swainshill	S. G. Weller, Esq.	5	3 0	..	..	30·02	..	..
d	Long Sutton (Agric. Coll.)	The Warden	5	1 0	479	..	31·67	..	138
d	South Warnborough (Vine Cot.)	Mrs. Gawne	5	1 0	416	..	29·68	..	..
D	Upon Grey (Hoddington Ho.)	Lord Basing	5	1 0	378	..	29·01	153	124
D	Basingstoke (Upton Grey Ho.)	G. W. Hayes, Esq.	5	1 0	400	..	29·20	181	129
d	Odiham (Mill House)	W. M. Dean, Esq.	5	1 0	241	..	(29·64)	..	..
D	Aldershot (Sewage Works)	Dr. G. W. Routley	5	1 0	231	..	27·20	179	131
D	Greywell (Pumping Station)	S. G. Weller, Esq.	5	1 0	258	..	29·80	211	142
D	Hook (Nately Hatch)	R. C. Mallock, Esq.	5	1 0	328	..	28·23	188	136
D	Sherborne St. John	Rear-Admiral A. S. Lafoné	5	1 0	260	29·0	27·50	184	136
d	Hartley Wintney (Ferney Close)	late A. E. Du Buisson, Esq.	5	0 11	251	..	26·47	..	..
D	Hartley Wintney Council Offices	Sanitary Inspector, R.D.C.	5	1 0	202	..	25·45	166	128
D	South Farnborough (R.A.E.) (+A)	The Meteorological Office	8	1 0	237	26·1	27·71	185	124
D	Winchfield (Elvetham Park)	Mr. T. J. Brownjohn	8	1 0	217	..	31·05	185	142
D	Bramley (Street Farm House)	F. Walkinshaw, Esq.	8	1 0	227	*28·8*	26·47	197	143
D	Stratfield Turgis (Byland's)	Miss D. Page-Roberts	5	0 8	218	..	28·20	221	154
D	Heckfield (Park Corner)	Miss V. Martineau	5	1 2	257	24·3	25·53	203	141
	9.—THAMES—Kennet. 65 sq. mi.								
D	Wolverton (Ewhurst Park)	Mr. H. J. Beckingham	5	1 6	410	..	28·77	205	148
D	Highclere (Castle Gardens)	Mr. A. W. Blake	5	1 6	500	..	32·54	182	143
D	Highclere (Black Ford)	W. A. Turner, Esq.	5	1 0	439	..	31·62	186	147
D	Highclere (Adbury Pk. Gdns.)	Mr. M. J. Lever	5	1 0	350	..	30·80	180	144
	BERKSHIRE. (Area, 722 sq. mi.)								
	1.—TEST. 2 sq. mi.								
	2.—THAMES—Bourne. 15 sq. mi.								
	Sunninghill (Frognal)	Mr. D. Chaplin	5	1 0	200	..	30·41	..	..
D	Ascot (Heatherwood Hospital)	The Medical Superintendent	5	1 0	320	..	28·85	191	134
d	Sunninghill (Blacknest P.S.)	E. J. Toy, Esq.	8	1 0	130	..	26·80	..	(129)
D	Sunninghill (Little Paddocks)	Col. J. N. Horlick, M.C.	5	1 0	200	..	27·83	190	138

DIVISION II—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	BERKSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—THAMES—Loddon & c. 162 sq. mi.								
	Finchampstead (Manor Farm)	M. B. Powell, Esq.	5	1 6	238	..	26·35	..	..
D	Finchampstead (Pye Hill)	Col. M. A. Carlisle Crowe, C.M.G.	5	1 0	320	..	25·28	163	139
D	Wellington College	A. L. Payne, Esq.	5	1 0	290	26·4	26·48	184	131
d	Broadmoor Asylum	The Medical Superintendent	5	1 0	300	..	(27·34)	..	(137)
D	Wokingham (Bucks Copse)	C. W. Marks, Esq.	5	1 0	174	..	23·97	168	133
d	Wokingham (Appin Lodge)	Rev. W. N. Blakeney	8	0 10	200	..	23·79	..	..
D	Wokingham (Sindlesham Ho.)	Mr. W. Balcombe	5	4 6	200	..	23·42	172	132
D	Winkfield (Ryemead)	Mrs. Aubrey Elliott	5	0 10	220	..	27·76	185	139
D	Winkfield (Maidens Green)	R. Crosbie-Hill, Esq.	5	1 0	210	..	27·05	188	135
D	Warfield (Jealott's Hill Farm)	Imperial Chemical Industries, Ltd.	5	1 0	220	..	25·85	188	134
D	Windsor (Royal Gardens)	Mr. C. H. Cook	5	1 0	88	24·9	25·52	185	134
	Pinkney's Green	R. P. Lord, Esq.	5	0 10	240	..	25·90	..	..
D	Remenham Hill (Wedmore)	Lt.-Col. C. D. Burnell, D.S.O.	5	1 0	300	..	27·94	182	136
D	Hambleden Lock	Mr. T. E. Wise	5	1 6	107	..	26·31	189	134
D	Hurley House	Rev. W. Farrer	5	1 0	105	..	24·14	164	130
	4.—THAMES—Kennet & c. 224 sq. mi.								
D	Inkpen (Manor Farm)	A. A. Lawrence, Esq.	5	1 5	450	..	31·79	196	147
D	Inkpen (Willows)	G. C. Goodhart, Esq.	5	1 0	475	..	33·21	163	135
d	Hampstead Marshall (Redhill)	Mrs. Lewis	5	1 0	400	..	28·62	..	..
D	Mortimer (Wokefield Park)	Dr. A. Palmer	5	1 0	220	..	25·45	181	142
D	Mortimer (Oakfield)	Rev. G. G. Skipwith	6	1 0	200	..	27·75	231	152
D	Brimpton (Stonehouse)	F. Hadden, Esq.	5	0 7	350	..	26·14	180	141
	Kintbury (Wallingtons)	A. S. Gladstone, Esq.	5	1 0	360	..	30·07	..	..
D*	Newbury (Greenham Common)	H. L. Bowman, Esq., D.Sc.	5	1 0	327	29·0	28·69	197	147
D	Newbury (Wash Hill)	C. F. B. Marshall, Esq.	5	1 0	385	..	31·35	199	139
D	Newbury (Tydeham)	J. H. Spackman, Esq.	5	1 0	400	..	29·53	198	143
D	Shinfield (University Col. Farm)	Dr. J. A. Crowther	5	1 0	200	..	24·06	175	135
	Upper Woolhampton	Rev. J. O. Dorman, B.A.	5	1 1	365	..	27·11	..	..
D	Bucklebury Place	Mr. J. E. Henshall	5	1 0	409	..	24·95	184	132
D	Reading W.W. (Bath Road)	L. C. Walker, Esq., C.E.	5	1 0	218	..	24·77	189	139
D	Reading (Tilehurst)	Miss M. W. Latham	5	1 4	200	..	26·63	189	140
D	Reading (Forbury Gardens)	A. S. Parsons, Esq., C.E.	5	1 5	143	24·9	22·77	173	124
D	Reading (University College)	Dr. J. A. Crowther	5	1 0	152	..	24·49	194	141
	Reading (Caversham Lock)	The Thames Conservancy	5	1 6	123	..	22·04	..	125
	Chieveley (Priors Court)	E. E. Palmer, Esq.	5	1 0	403	..	(26·56)	..	(137)
	5.—THAMES—Ock & c. 319 sq. mi.								
D	Bradfield (Cross Springs)	Mrs. Preston-Tewart	5	0 10	325	..	28·31	182	141
D	Reading (Englefield)	J. H. Benyon, Esq.	5	1 0	175	27·4	25·20	174	138
D	Hermitage (Oare)	F. Bateson, Esq.	5	1 0	450	..	27·28	211	136
D	Bradfield (Buckhold Hill Ho.)	N. Vaslet, Esq.	5	1 0	300	..	28·46	173	144
D	Yattendon Court Apiary	N. Vaslet, Esq.	5	1 0	350	..	27·31	181	135
D	Upton (Manor House)	Miss C. S. Fry	5	1 0	240	..	23·91	186	128
D	Wantage (Lockinge Rectory)	Rev. G. C. Keble	5	1 1	360	..	28·70	169	137
D	Wantage Vicarage	Rev. A. Gossage Robinson	5	0 9	312	..	28·70	196	142
d	Kingstone Lisle Gardens	Mr. F. Brow	5	0 9	700	..	28·12	..	..
d	Uffington (Woolstone Lodge)	Miss A. E. Butler	5	1 0	350	..	(27·60)	(160)	(135)
	Steventon (Milton Hill)	R. H. Betteridge, Esq.	5	1 6	300	..	25·52	..	..
D	Wallingford (St. Leonard's R.)	Rev. A. Simmons	5	1 4	142	..	24·15	180	131
D	Wallingford (Woodlea)	G. F. Slade, Esq., M.B.E.	5	0 9	200	*26·5*	23·71	194	137
D	Wallingford Castle	Miss E. Hedges	5	1 6	175	..	23·91	191	130
D	Wallingford (Style Acre)	A. L. Morphew, Esq.	5	1 4	220	..	25·70	183	136
d	Didcot (Sewage Works)	Wallingford R.D.C.	5	1 1	170	..	22·03	..	..
D	Abbots Wittenham Rectory	Rev. W. F. B. Ward	5	1 0	190	..	22·38	185	130
D	Long Wittenham (Willington)	H. J. Hewett, Esq.	5	1 0	167	..	23·21	173	140
D	Abingdon (Sewage Works)	W. H. Lewis, Esq., C.E.	8	1 0	169	..	24·27	194	139
D	Abingdon (Twickenham House)	Mrs. G. Saxby	5	1 0	197	..	25·40	..	..
D	Abingdon (The Firs)	Miss G. G. Challenor	5	1 3	200	..	23·99	178	131
D	Abingdon (Donnington)	R. W. Langford, Esq.	5	1 0	199	..	24·85	187	139
D	Abingdon (Northcourt House)	M. T. Tatham, Esq.	5	1 0	190	..	23·84	177	132
D	Boars Hill (Sherwood)	Rev. G. M. Nuttall-Smith, M.A.	5	1 0	444	..	25·99	178	128
d	Oxford (Kennington Nursery)	W. G. Gray, Esq.	5	0 10	300	..	25·77	..	125

* Gauge somewhat over-sheltered.

DIVISION III—SOUTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
MIDDLESEX. (Area, 232 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—THAMES—Colne & Brent. 185 sq.mi.								
Weybridge (Shepperton Lock)	Thames Conservancy	5	1 0	41	..	24·57	154	134
D Littleton (Queen Mary Res.)	Met. Water Board	5	1 0	44	..	23·39	169	130
D Hampton Waterworks	Met. Water Board	5	1 0	27	..	23·27	166	128
d Hampton (The Manor House)	J. Hughes, Esq.	5	2 0	43	..	22·85	..	..
D Teddington (Holmesdale)	E. J. Allcard, Esq.	5	4 2	25	..	25·53	165	122
D Staines Reservoir (West Side)	Met. Water Board	5	1 6	53	..	24·93	165	120
D Staines Reservoir (East Side)	Met. Water Board	5	1 6	53	..	23·51	166	120
D Twickenham (Sewage Works)	The Borough Surveyor	5	1 0	37	..	22·47	163	122
D Sipson (Hollycroft)	Mr. W. J. Mitchell	5	1 0	94	..	24·16	161	138
D Kew Bridge (Waterworks)	Met. Water Board	5	1 0	36	..	24·51	160	128
D Chiswick (The Mall)	Miss K. Felkin	5	0 10	6	..	26·02	168	135
d Chiswick (Turnham Green)	E. Willis, Esq., C.E.	8	1 0	21	..	25·81	..	..
D Hanwell	A. Dryland, Esq., C.E.	5	1 9	36	..	27·28	180	137
D Ealing (St. Paul's Vicarage)	Rev. A. H. Cooper	5	1 6	100	..	26·79	184	135
D Ealing (Longfield Avenue)	W. R. Hicks, Esq., C.E.	5	0 9	114	..	23·60	155	124
D Ealing (St. Stephen's Road)	H. W. Peal, Esq.	5	0 10	156	..	25·61	169	129
D Hayes Sewage Works	A. Dryland, Esq., C.E.	5	2 3	98	..	23·15	169	125
D Ealing (Hanger Hill Reservoir)	Met. Water Board	5	1 0	206	..	25·78	178	132
D Greenford	A. Dryland, Esq., C.E.	5	1 3	61	..	26·79	196	137
D Perivale (Northern Sewage Farm)	W. R. Hicks, Esq., C.E.	8	1 0	56	..	24·96	182	136
D Alperton (Sewage Works)	C. R. W. Chapman, Esq., C.E.	8	1 2	80	..	27·12	186	139
D Willesden Reservoir	Met. Water Board	5	1 0	167	..	27·71	160	130
d Willesden Green (Strode Road)	Miss Lamport	5	1 0	150	..	27·00	(170)	(136)
D Willesden (Stonebridge Fm.) (R)	F. Wilkinson, Esq., C.E.	10	5 9	100	..	25·95	163	128
d Ickenham Sewage Works	A. Dryland, Esq., C.E.	5	1 8	109	..	22·60	..	126
D Sudbury (Station Approach)	L. H. Powers, Esq.	8	1 0	153	..	25·40	186	127
D Golders Green (Dunstan Road)	Capt. A. E. Mackenzie	5	1 0	240	..	25·47	175	133
D Highgate (North Hill Depot)	W. H. Adams, Esq., C.E.	5	1 0	303	..	27·06	187	132
d Harrow (Rosebank Avenue)	C. L. Modlen, Esq.	5	1 0	200	..	24·39	..	..
D Harrow (Oakhurst)	Hugh Gardner, Esq.	5	1 0	295	..	25·03	185	130
d Harrow (Bessborough Rd. Depot)	J. P. Bennetts, Esq., C.E.	5	1 0	215	..	25·10	..	137
D Hendon (Sewage Works)	A. O. Knight, Esq., C.E.	6	1 6	153	..	26·02	168	137
D Hendon (Central School)	J. Burgess, Esq.	5	1 2	200	..	24·69?	191	137
D Wealdstone (Sewage Works)	H. Walker, Esq.	5	1 0	154	..	25·77	174	130
d Wealdstone (Kodak Works)	Messrs. Kodak, Ltd.	5	1 0	193	..	23·28	..	..
D Harrow (Wealdstone House)	Miss H. O. E. Cobb	5	1 0	236	..	25·62	..	..
Northwood (Tandridge)	Chas. Price, Esq.	5	1 0	..	..	26·14	173	136
D Northwood (Haslemere)	Miss L. McBean	5	1 0	240	..	28·83	166	135
d Pinner (The Four Winds)	R. H. Daw, Esq.	5	1 0	185	..	24·86	(183)	(125)
D Edgware M.C.C. Depot	A. Dryland, Esq., C.E.	5	0 9	179	..	27·11	167	133
D Mill Hill (Ridgeway House)	Major N. G. Brett-James	5	1 0	375	..	26·79	155	132
D Stanmore	A. Dryland, Esq., C.E.	5	0 9	435	..	25·70	167	135
D Highwood Hill	T. B. Norgate, Esq.	5	0 11	375	..	28·52	183	137
D Bushey Heath (Highfield)	W.B.Worthington, Esq., C.E.	5	1 0	503	..	27·24	194	138
d Elstree (Barnet Lane)	G. V. Maxted, Esq., C.E.	8	1 0	490	..	32·62	(181)	(135)
D Potters Bar (Mount Grace)	Mr. E. W. Halsey	5	1 3	375	..	28·96	181	144
2.—THAMES—Lea. 47 sq. mi.								
D Stroud Green (Mount View Rd.)	L. R. Bennett, Esq.	5	1 0	212	..	24·88	176	129
D Stroud Green (Oakfield Road)	E. A. Madge, Esq.	5	1 0	206	..	26·19	160	131
D Crouch End (Barrington Rd.) (+A)	W. H. Adams, Esq., C.E.	8	1 0	118	..	27·91	190	138
D Tottenham (Drayton Road)	Medical Officer of Health	5	1 3	51	23·3	27·26	160	134
D Hornsey (High Street)	Met. Water Board	5	1 2	107	..	26·12	168	135
D Muswell Hill (Sewage Farm) (+A)	W. H. Adams, Esq., C.E.	8	1 0	209	..	28·84	191	136
D Wood Green (Maryland Road)	F. C. Hornsey, Esq.	6	1 0	110	..	25·79	172	134
D Finchley (Victoria Park)	P. T. Harrison, Esq., C.E.	5	1 0	272	..	27·00	177	133
D Bowes Park (Palmerston Road)	W. H. Heathfield, Esq.	5	1 5	100	..	27·11	180	132
D Palmers Gr. (Broomfield Pk.) (+A)	R. Phillips, Esq., C.E.	8	1 6	136	..	27·16	163	145
D Southgate	Dr. A. S. Ransome	5	1 0	250	..	28·24	205	137
D Winchmore Hill (Elsiedene Road)	V. E. Steers, Esq.	5	1 0	200	..	28·63	177	137
D Ponders End (Bylock Hall)	H. E. Freir, Esq.	5	1 0	50	..	24·46	172	135
D Ponders End Pumping Station	Met. Water Board	5	1 0	45	..	24·15	159	136
D Enfield (Southbury Road)	Met. Water Board	5	1 0	105	24·7	27·02	174	140

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	MIDDLESEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—THAMES—Lea. 47 sq. mi.								
d	Enfield (Forty Hill)	Dr. E. C. Carter	5	0 11	125	..	24·49	..	..
D	Enfield (Roselands, Turkey St.)	E. S. Rashleigh, Esq.	5	1 0	80	..	25·23	173	134
D	Waltham Cross (Sewage Works)	J. E. Sharpe, Esq.	5	1 0	61	..	24·60	157	134
	HERTFORDSHIRE. (Area, 635 sq. mi.)								
	1.—THAMES—Thame. 10 sq. mi.								
D	Tring (Akeman St.)	T. Grace, Esq.	8	1 0	450	..	31·45	196	129
D	Tring (Pendley Manor)	Mrs. J. G. Williams	5	1 0	420	..	31·32	183	131
D	Tring (Brookfield)	Brig.-Gen. C. J. Steavenson, C.B., C.M.G.	6	1 3	430	..	30·21	194	126
	2.—THAMES—Colne and Brent. 199 sq. mi.								
D	Northwood (Woodhouse Eaves)	Miss S. F. Fox, M.D.	5	1 0	400	..	29·57	221	150
D	Bushey Heath (California La.)	C. C. Cooper, Esq.	5	1 0	500	..	25·88	168	127
	Totteridge (West Lodge)	P. D. Walker, Esq.	5	1 4	410	..	(28·05)	..	..
	Rickmansworth (Croxley Green)	S. Ingleby Oddie, Esq.	5	1 0	262	..	28·76	..	..
D	Rickmansworth (Valley Road)	E. L. Hawke, Esq.	5	1 0	182	..	30·69	241	148
D	Barnet (Bedford Avenue)	Miss M. Haines	5	1 4	350	..	27·92	194	141
D	Barnet (Sewage Works)	E. Scott, Esq., C.E.	5	1 0	295	..	27·48	207	139
d	Elstree (Aldenham House)	Mr. E. Beckett	5	1 0	305	..	22·30	..	121
D	Watford (Oxhey Grange)	J. Doyle Penrose, Esq.	5	0 7	295	..	28·11	177	139
D	Watford (Colne Valley W.W.)	C. P. Sinclair, Esq.	5	3 0	200	..	26·56	185	131
d	Watford (Waterworks)	W. W. Newman, Esq., C.E.	6	1 9	175	..	26·35	..	126
d	Watford (Cassiobury Pk. Av.)	E. A. Robins, Esq.	5	1 0	240	..	28·34	..	..
D	Watford (Park Road)	Miss L. M. Slinn	5	1 6	257	..	28·10	180	136
D	Heronsgate (Waterfield House)	A. J. Richardson, Esq.	5	1 0	390	..	35·29	224	154
D	Sarratt (Micklefield Green)	J. O. Hickman, Esq.	5	0 6	380	..	29·72	175	139
D	Shenley Grange	J. Charrington, Esq.	5	0 9	430	..	29·71	176	137
D	Shenley (Kitwells)	T. H. Riches, Esq.	5	1 0	420	..	29·17	185	139
D	Sarratt (Goldingtons)	P. Clutterbuck, Esq.	5	1 0	384	..	30·55	156	138
D	Chipperfield (Little Callipers)	Miss M. M. Rivington,	5	1 0	407	..	29·95	158	140
D	Kings Langley (Fir Tree Cottage)	Edward Toms, Esq.	5	1 0	278	..	28·67	190	133
d	Kings Langley (Langley Rise)	F. W. Rowson, Esq.	5	0 9	300	..	28·09	..	137
D	Park Street (Bricketwood)	F. J. McLees, Esq.	5	1 0	300	..	28·41	178	133
D	Hemel Hempstead (Apsley Mills)	Messrs. J. Dickinson & Co.	24	1 4	268	27·9	31·13	204	146
D	Colney Heath (Tyttenhanger P.S.)	J. F. Haseldine, Esq.	5	0 9	241	..	27·89	205	125
D	Hemel Hempstead (Northridge)	R. C. Micklem, Esq.	5	1 0	460	..	33·81	205	139
D	St. Albans (Co. Mental Hosp.)	G. Goodchild, Esq.	5	1 0	295	..	27·05	172	130
D	St. Albans (County Museum)	Mrs. Bullen	5	1 0	389	..	27·74	167	133
D	St. Albans (Oaklands)	J. Hunter Smith, Esq.	5	1 0	272	..	26·35	167	132
D	St. Albans (Gorhambury)	Mr. O. Twitchett	5	1 0	423	..	29·29	182	138
D	Hatfield (Hatfield P. Stn.)	J. F. Haseldine, Esq.	5	1 0	334	..	28·55	202	131
D	Berkhamsted (Rossway)	The Lady Hadden	5	1 1	590	..	34·43	223	149
D	Berkhamsted (Anglefield)	E. T. Browne, Esq.	5	1 0	450	29·8	32·31	187	166
d	Berkhamsted Golf Club	The Secretary	8	1 0	550	..	31·56	..	127
D	Tring (Cowroast Lock) *old g.*	Grand Union Canal Co.	5	3 6	394	..	28·70	154	124
D	Tring (Cowroast Lock) *new g.*	Grand Union Canal Co.	5	1 0	390	..	29·87	154	131
D	Redbourn (Crecy)	Roger M. Dixon, Esq.	5	1 0	350	..	31·83	174	136
D	Harpenden (Rothamsted) (+A)	Lawes Agricultural Trust.	8	0 9	420	26·7	27·48	181	125
	Harpenden (Rothamsted)	Lawes Agricultural Trust.	5	1 0	420	..	27·80	..	..
	Harpenden (Rothamsted)	Lawes Agricultural Trust.	72+87	0 9	420	..	29·45	..	..
d	Little Gaddesden (Ringshall End)	H. C. Bradby, Esq.	..	..	600	..	(31·68)	..	..
	3.—THAMES—Lea. 340 sq. mi.								
d	Cheshunt (Manor House)	J. E. Sharpe, Esq.	5	1 0	83	..	25·48	..	129
d	Northaw School	C. Steventon, Esq.	5	5 0	400	..	23·81	..	..
D	Cheshunt Yard	Met. Water Board	5	1 0	100	..	26·72	173	134
D	Cheshunt (Cheshunt Park)	J. A. Wanklyn, Esq.	5	0 9	209	..	26·54	177	132
D	Cheshunt (Darnicle Hill P. Stn.)	Met. Water Board	5	1 0	250	..	28·22	172	143
D	Hertford (Epping House)	Lady Brodie Henderson	5	0 9	400	..	26·25	187	133
d	Essendon Place Gardens	J. B. Healing, Esq.	5	1 0	365	..	28·30	..	128
	Little Berkhampstead	A. Noble, Esq.	5	1 0	380	..	26·51	..	..
d	Hatfield (Co. Surveyor's Office)	Lt.Col. A. E. Prescott, C.E.	5	1 0	265	..	(28·96)	..	..
D	Hoddesdon	H. F. Hayllar, Esq.	5	5 0	120	..	26·60	171	127
D	Hoddesdon (Feilde's Weir)	Met. Water Board	8	1 7	95	..	24·99	165	127

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	HERTFORDSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—THAMES—Lea—(*con.*)								
D	Haileybury College	The Headmaster	8	1 0	270	..	27·57	187	129
D	Hertford (Bayfordbury)	H. W. Clinton Baker, Esq.	8	1 2	250	..	27·33	174	137
D	Stanstead Abbots (Warrax)	E. H. Barlow, Esq.	5	1 2	110	..	27·61	174	133
D	Gilston Park	Mr. J. Dewhurst	8	1 0	175	..	26·99	179	141
D	Welwyn Garden City	H. A. Cook, Esq., C.E.	5	1 0	246	..	24·54	169	120
D	Hertford (Sewage Works)	Met. Water Board	5	1 0	123	..	26·92	183	131
D	Ware (Red House)	Met. Water Board	5	1 0	105	..	26·31	173	128
d	Ware Grammar School	The Headmistress	5	1 0	118	..	(25·94)	(161)	(120)
D	Ware (Chadwell Spring)	Met. Water Board	5	1 0	140	..	25·94	162	125
D	Welwyn Garden City (Valley Rd.)	Comdr. W. George Lingham.	5	1 0	308	..	26·81	200	133
D	Welwyn (Harmer Green)	Mrs. E. Weber	5	1 0	403	..	27·52	177	137
d	Welwyn (Codicote Lodge)	Mr. G. J. Miller	5	1 0	340	..	28·78	..	126
D	Much Hadham	T. Woodham Mott, Esq.	5	1 0	212	..	26·62	181	136
D	Much Hadham (Lordship)	Capt. W. Glynes Bruty.	5	0 10	205	..	25·66	160	131
D	Bishop Stortford (Twyford H.)	Laurie Frere, Esq.	5	1 0	181	..	25·42	166	138
D	Watton (Frogmore Hall)	Lt.-Col. J. B. Gilliat, D.S.O.	5	0 9	250	..	25·87	161	129
D	Standon	F. H. Wace, Esq	5	2 0	375	..	23·83	171	131
D	Little Hadham (Hadham Hall)	W. Minet, Esq.	5	0 10	338	..	28·10	162	149
	Hitchin (King's Walden Bury)	Major J. F. Harrison	8	1 2	400	..	25·95	..	..
D	Hitchin (Preston)	R. de. V. Pryor, Esq.	8	1 0	484	..	27·16	167	131
d	Buntingford (Coles)	Mrs. Bryan Laing	5	0 7	375	..	27·25	..	137
D	Furneaux Pelham (The Brewery)	G. Warren Bindloss, Esq.	5	1 0	300	..	27·55	174	133
D	Royston (Therfield Rectory)	Rev. H. R. Humphreys.	5	1 0	512	25·2	29·13	174	142
	4.—OUSE. 86 sq. mi.								
D	Offley (School House)	C. W. Mears, Esq.	5	1 0	526	..	28·06	161	130
D	Graveley Rectory	Rev. R. E. C. Walker.	5	0 10	325	..	31·62	183	156
D	Hitchin (Newlands)	F. Ransom, Esq.	5	1 0	271	..	28·45	184	136
D	Hitchin (High Down)	Miss E. Pollard	5	1 1	421	..	26·63	215	129
D	Letchworth (Gernon Road)	A. W. Brunt, Esq.	5	1 0	290	..	25·91	172	126
d	Letchworth (Sollershott)	Miss H. Leather	5	1 0	300	..	26·81	..	..
d	Letchworth (Sollershott West)	Edward Grubb, Esq.	8	0 11	310	..	26·44	..	..
d	Letchworth (Fire Station)	The Surveyor, U.D.C.	5	1 0	290	..	25·41	..	..
D	Baldock	Dr. Bertram Suggit	8	2 0	210	..	26·62	169	130
D	Barley (Dalnyveed)	W. F. Sermons, Esq.	5	1 0	300	..	25·83	150	122
D	Royston (Earls Hill House)	Col. E. C. M. Phillips, D.S.O.	8	1 3	225	..	27·24	170	135
	BUCKINGHAMSHIRE. (Area, 743 sq. mi.)								
	1.—THAMES—Cherwell. 30 sq. mi.								
	2.—THAMES—Thame. 158 sq. mi.								
D	Parslow's Hillocks	Col. C. S. Prichard	5	1 0	770	..	32·56	210	147
D	Towersey Vicarage	Rev. H. E. Cooper	5	1 0	250	..	28·94	181	142
	Ellesborough (The Springs)	J. K. Bateman, Esq.	5	1 2	400	..	28·21	..	..
D	Little Kimble	Dr. L. T. Burra	5	0 10	370	..	25·76	163	121
d	Weston Turville (*new g*)	G. Eland, Esq.	5	1 0	320	..	27·05	..	125
d	Cuddington School	A. R. Alldridge, Esq.	5	1 0	292	..	27·96	(179)	(131)
D	Tring (Bulbourne)	Grand Union Canal Co.	5	1 0	401	..	26·57	180	121
D	Aylesbury (Sewage Works)	W. H. Taylor, Esq.	5	1 0	251	..	25·49	192	139
d	Mentmore Gardens	Mr. T. Lindores	5	1 3	400	..	29·85	..	140
D	Quainton (Quainton Cottage)	L. H. West, Esq., O.B.E.	5	1 0	350	..	23·37	164	120
	3.—THAMES—Wye & c. 129 sq. mi.								
D	Eton (Tangier Island)	F. N. McRae, Esq.	5	0 8	68	..	25·01	180	133
D	Slough (Upton)	R. Bentley, Esq.	5	1 0	78	23·9	23·31	188	125
D	Taplow Court Gardens	G. H. Emmett, Esq.	8	1 0	217	..	24·48	153	133
D	Taplow (Hitcham Grange)	Hon. C. S. Irby	5	1 0	180	..	22·74	161	129
D	Henley-on-Thames (Greenlands)	Lord Hambleden	5	1 0	116	..	26·19	153	143
D	Bourne End	Major Forbes Holland	5	2 0	91	..	27·84	190	136
D	High Wycombe (Flackwell Hth.)	E. Dickson Park, Esq.	5	1 10	365	..	28·11	186	132
D	High Wycombe (Easton St.)	H. S. Wheeler, Esq.	5	0 11	253	25·9	31·76	195	138
D	High Wycombe (Roy. Gram. Sch.)	S. A. Watt, Esq	9	1 0	545	..	28·61	177	133
D	Penn (Woodside)	Miss E. M. T. Epps	5	1 0	500	..	30·61	185	137
D	Penn (Rayners)	Mr. E. Peett	5	1 10	547	..	31·01	174	135
D	Hampden House	Earl of Buckinghamshire	5	1 0	695	..	28·98	165	132

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
BUCKINGHAMSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—THAMES—Colne. 133 sq. mi.								
d Wraysbury School	R. Watson, Esq.	5	0 8	59	..	24·65	..	..
D Slough (Ditton Park)	G. B. Harrison, Esq.	5	2 0	70	..	24·75	163	137
D Slough (Langley)	R. H. Major, Esq.	8	0 10	85	23·9	23·77	177	129
d Slough (Seed Trial Ground)	Messrs. Sutton & Sons	5	0 9	100	..	23·92	..	..
D Stoke Poges (Council School)	S. A. Moore, Esq.	5	1 0	210	..	26·30	199	140
D Denham Golf Club	The Secretary	5	0 11	210	..	25·75	165	134
d Gerrards Cross (Bulstrode Gdns.)	Mr. G. Taylor	5	1 6	280	..	29·30	..	129
d Beaconsfield (Hall Barn)	J. Dickson, Esq.	5	0 8	341	..	27·78	..	..
D Chalfont St. Giles (Up Corner Cot.)	Capt. R. E. Field	8	1 0	350	..	31·33	172	141
D Beaconsfield (The Manse)	S. H. Dyer, Esq.	5	0 11	375	..	29·07	170	125
d High Wycombe (Hazlemere Sch.)	A. J. Chapman, Esq.	5	1 0	568	..	29·98	..	..
D Chalfont St. Giles (Roughw'd P'k.)	Thurston Agelasto, Esq.	5	1 0	400	..	29·79	182	138
D Amersham Common (Stanmore)	W. Garton, Esq.	5	1 0	517	..	32·19	188	138
d Chesham (Nashleigh Hill)	Mrs. Hayes	5	1 0	530	..	30·77	(199)	(137)
5.—OUSE. 293 sq. mi.								
D Oving House	Mrs. H. Yates Thompson	5	1 0	515	*28·1*	26·76	192	134
D Wing (Burcott)	R. H. Ayres, Esq.	5	1 6	407	..	27·99	176	132
D Swanbourne House School	L. L. C. Evans, Esq.	5	1 0	411	..	28·38	161	140
D Mursley Hall	Lady Beecham	8	1 0	490	..	27·22	183	124
D Buckingham (Market Hill)	A. Pettipher, Esq.	5	1 0	300	..	26·39	208	139
D Wavendon (Endowed School)	T. G. M. Watson, Esq.	5	1 0	300	..	24·92	171	134
D Stony Stratford (Calverton L.)	Lt.-Col. L. C. Hawkins	5	1 0	230	..	25·10	179	136
D Wolverton (St. George's Vic.)	Rev. Canon W. L. Harnett.	5	1 0	270	..	24·34	196	130
D Wolverton (Gables Lodge)	J. Forster, Esq.	5	1 0	264	..	24·82	188	136
d Wolverton (Council School)	The Headmaster	5	5 0	263	..	23·43	..	..
d Newport Pagnell (Lathbury)	F. W. Coates, Esq.	8	1 2	228	..	24·25	(179)	(130)
d Turvey (Brayfield House)	Major D. Farrer, J.P.	5	1 0	188	..	25·31	..	126
OXFORDSHIRE. (Area, 756 sq. mi.)								
1.—SEVERN—Upper Avon. 10 sq. mi.								
D Sibford Ferris (Woolman Cottage)	Joshua Lamb, Esq.	5	1 0	570	*27·6*	30·49	196	140
2.—THAMES—Windrush & c. 261 sq. mi.								
d Kelmscott	R. Hobbs, Esq.	6	1 2	200	..	26·57	..	127
D Bampton (C.E. School)	E. W. Fry, Esq.	5	1 10	233	..	27·07	164	133
Broughton Poggs	Mrs. Hardcastle	5	1 0	275	..	28·44	..	..
d Filkins	Hon. Sir Stafford Cripps, K.C.	5	2 7	279	..	26·87	(174)	(134)
D Witney (Cokethorpe)	Major H. G. Feilden	5	3 0	230	..	30·97	160	148
D Eynsham (Barnard Gate)	Basil de F. Osmaston, Esq.	5	4 6	245	..	25·48	161	137
D Leafield (Wireless Station) (+A)	Meteorological Office	8	1 0	612	27·3	29·55	189	139
d Charlbury (Cornbury Park)	Mr. B. Campbell	5	1 0	420	..	32·20	..	153
D Wootton Rectory	Rev. F. R. Marriott	5	1 0	375	..	29·16	178	144
D Lyneham	R. de M. Pratt, Esq.	5	1 0	351	..	29·14	192	145
D Bruern Abbey (The Gardens)	F. S. Smith, Esq.	5	1 0	340	..	31·36	179	145
D Chadlington (Langston House)	Lt.-Col. F. W. Schofield, CMG.	5	1 0	430	..	30·40	179	142
Chadlington (Dean Manor)	M. B. Watts, Esq.	5	1 0	425	..	30·11	..	..
D Churchill (The Grange)	J. M. Blair, Esq.	5	1 0	500	..	29·13	190	141
D Chipping Norton (Heythrop Col.)	The Procurator	8	1 0	600	..	35·10	209	153
D Chipping Norton (Bungalow)	T. H. Pettipher, Esq.	5	1 0	750	..	31·32	203	141
D Chipping Norton (Choice Hill)	E. W. Arkell, Esq.	5	1 0	500	..	29·55	184	141
3.—THAMES—Cherwell. 250 sq. mi.								
D Nuneham Park Gardens	Mr. W. E. Hewitt	8	1 0	280	..	28·52	171	140
D Oxford (Hincksey Pumping Sta.)	City Engineer	8	1 0	187	..	25·45	188	130
Oxford (Osney Lock)	Thames Conservancy	5	1 6	188	..	27·25	179	138
D Oxford (Magdalen College)	F. J. Parker, Esq.	5	1 0	186	23·8	25·37	190	136
D Oxford (Radcliffe Obs.) (+A)	H. Knox Shaw, Esq.	8	1 8	208	24·8	26·92	189	134
D Headington (Warneford Asy.)	Dr. A. W. Neill	5	1 0	300	..	26·13	168	134
D Headington (Forest Lodge)	Major A. V. Spencer, D.S.O.	5	0 11	333	..	27·20	168	135
D Headington (Charlton Lea)	L. Dawes, Esq.	5	1 0	300	..	25·53	167	129
D Headington Hill (Thornhill)	E. S. Fry, Esq.	5	1 0	..	..	25·56	183	135

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	OXFORDSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—THAMES—Cherwell—(*con.*)								
D	Elsfield (Home Farm)	Miss M. J. Parsons	5	1 0	355	..	25·30	167	131
D	Tackley (Hill Court)	W. Evetts, Esq., Junr.	5	1 0	340	27·9	28·10	195	146
D	Middleton Park (*new g*)	The Earl of Jersey	5	1 0	326	..	27·79	189	140
D	Upper Heyford (+A)	The Meteorological Office	8	1 0	408	..	27·23	198	133
D	Steeple Aston (The Grange)	Arthur E. Bradshaw, Esq.	8	1 0	400	27·2	27·49	200	134
D	Steeple Aston (Hill House)	Mr. J. F. Hicks	5	1 0	406	..	28·46	183	143
D	Deddington (Souldern Court)	P. Withers, Esq.	5	1 0	340	..	27·42	179	135
D	West Adderbury (Little Manor)	Lt.-Col. H. E. du C. Norris	5	0 10	330	..	28·48	185	141
D	West Adderbury (Cross Hill)	Lt.-Col. H. E. du C. Norris	5	1 0	338	..	27·68	190	138
D	West Adderbury (St. Amand's)	Miss M. M. Bradford	8	1 6	320	..	29·30	195	149
D	Adderbury (The Rookery)	C. C. Bradford, Esq.	8	1 0	323	..	29·92	184	153
D	Banbury (Cotefield)	Capt. C. N. Keyser	5	1 0	300	..	27·30	159	138
D	Broughton Rectory	Rev. B. W. Bradford	5	1 6	370	..	30·09	182	135
D	North Newington (Grafton Cot.)	W. Pikesley, Esq.	5	1 0	425	..	27·65	178	145
D	Grimsbury (Banbury W.W.)	J. E. Commin, Esq.	5	1 3	316	..	25·27	201	138
D	Wroxton	Hon. Mrs. Fitz Gerald	12	1 6	500	..	30·76	193	136
	4.—THAMES—Thame & c. 210 sq. mi.								
D	Caversham (St. Peter's Hill)	Rev. G. V. Proctor	5	1 0	220	..	24·72	174	131
d	Goring Heath	Rev. F. T. Wintle	5	1 0	400	..	27·84	(224)	(140)
D	Harpsden (Cray) (+A)	B. E. Dunbar Kilburn, Esq.	5	1 0	230	..	26·01	186	136
D	Henley-on-Thames (Hart St.)	A. Edward Hobbs, Esq.	5	1 6	110	..	24·75	171	126
D	Henley-on-Thames (Greys Lane)	G. F. Smith, Esq.	5	0 9	123	..	26·81	163	141
D	Henley-on-Thames (Greys Gr.)	Mrs. H. Wolferstan	5	1 6	350	..	27·39	206	141
D	Ipsden (Hailey)	Glynne Williams, Esq.	5	1 0	350	..	25·92	191	135
D	Nettlebed (Joyce Grove) No. 1	Mr. F. Morby	5	1 0	590	..	31·96	159	132
D	Swyncombe House	C. W. Christie-Miller, Esq.	5	1 0	515	..	29·61	163	140
D	Culham	F. Mitchell, Esq.	5	0 10	180	..	23·10	181	136
	Culham (Zouch Farm)	P. E. Saunder, Esq.	5	1 3	186	..	21·17	..	..
d	Culham College	E. H. Metcalf, Esq.	5	1 0	213	..	(23·02)	(164)	(126)
D	Clifton Hampden (Manor House)	Lord Aldenham	5	1 0	190	*24·9*	24·30	170	133
D	Watlington (Pyrton Manor)	Major H. Ducat Hamersley.	5	1 0	325	28·7	25·99	185	138
D	Wheatfield	A. J. Spencer, Esq.	5	0 11	275	..	28·08	153	130
	Toot Baldon (Potland)	D. Clinkard, Esq.	5	1 0	288	..	23·68	150	116
	5.—OUSE. 25 sq. mi.								
	NORTHAMPTONSHIRE. (Area, 1003 sq. mi.)								
	1.—SEVERN—Upper Avon. 60 sq. mi.								
D	Rugby (Kilsby Vicarage)	Rev. C. Ryder Macnally	5	1 3	470	..	34·35	189	146
D	Winwick Warren	Capt. P. L. Ransom	8	1 5	648	..	32·58	243	146
D	Naseby Reservoir	Grand Union Canal Co.	5	1 6	519	..	30·20	221	134
	2.—THAMES—Cherwell. 77 sq. mi.								
D	Croughton	C. A. St. George Moore, Esq.	5	1 0	430	..	27·66	184	132
d	King's Sutton (Manor House)	G. Morgan, Esq.	5	1 0	338	..	27·24	..	..
	3.—OUSE. 148 sq. mi.								
D	Brackley (Waterworks)	W. M. Oldreive, Esq.	5	1 2	471	..	28·80	168	138
D	Hazelborough Woods	Office of Woods	8	1 0	241	..	30·56	172	164
d	Silverstone (Council School)	J. P. Osborne, Esq.	5	1 0	400	..	27·06	..	..
D	Wappenham (Lois Weedon Vic.)	Rev. E. V. Fenn	5	1 2	400	..	29·50	205	142
D	Towcester (Bradden House)	Miss U. Grant-Ives	5	0 10	420	..	29·91	195	142
D	Towcester (Easton Neston)	Sir T. Fermor-Hesketh, Bt.	8	1 0	325	..	25·06	184	133
d	Roade (Council School)	R. W. Janes, Esq.	8	1 0	394	..	25·56	..	125
d	Hargrave Hall	Sir K. Murchison	5	1 0	273	..	24·90	..	..
	4.—NENE. 622 sq. mi.								
D	Salcey Forest	Office of Woods	8	1 3	370	..	30·82	172	168
D	Blisworth (Crieff House)	A. Westley, Esq.	5	1 0	351	*25·1*	26·09	191	125
D	Blisworth (Grand Junc. Canal)	Grand Union Canal Co.	5	1 6	300	..	24·72	181	123
D	Castle Ashby	A. R. Searle, Esq*	5	1 4	230	..	26·52	203	122
D	Little Houghton House	Christopher Smyth, Esq.	5	1 0	270	..	24·63	176	120

* *Per* Northamptonshire Natural History Society.

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
NORTHAMPTONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NENE—(*con.*)								
D Northampton (Upton)	J. R. Foster, Esq	5	1 0	270	..	23·89	144	111
D Northampton (General Hosp.)	H. St. John Wood, Esq	5	1 1	259	..	25·17	163	123
D Northampton (Mental Hosp.)	W. R. Budgen, Esq.*	8	1 2	398	..	27·13	197	118
d Northampton (Stimpson Av.)	F. Tomlinson, Esq., C.E.†	8	1 0	329	..	24·38	..	..
D Northampton (Mercers Row)	R. H. Primavesi, Esq	5	12 0	240	..	23·97	201	118
D Flore	Major C. A. Markham	5	1 0	344	..	28·66	187	131
D Duston (Southfield Road)	W. P. Walker, Esq	5	1 0	342	..	28·91	192	139
D Wollaston	G. Harris, Esq	5	2 0	250	..	23·45	173	115
D Daventry (Tunnel End)	Grand Union Canal Co	5	1 6	394	..	29·84	187	127
D Althorp Park	Mr. G. Low*	5	1 3	414	..	28·58	175	138
D Sywell Hall	Brig.-Gen. H. E. Stockdale	5	1 0	371	..	28·49	190	133
D Pitsford (Sedgebrook)	Major C. A. Markham	5	1 0	311	24·5	27·81	159	118
D Wellingborough (Swanspool)	R. S. Henshaw, Esq., C.E.	5	1 0	169	24·3	26·27	186	125
D Wellingborough (Sewage Works)	R. S. Henshaw, Esq., C.E.	5	1 0	139	..	25·06	170	113
D Wellingboro' (Bushfield W.W.)	R. S. Henshaw, Esq., C.E.	8	0 11	286	..	24·81	181	113
Watford Court	Lord Henley	8	1 0	380	..	31·83	..	..
D Raunds (Day School)	The Headmaster	5	1 0	200	23·5	25·06	163	111
D Lamport Hall Gardens	Mr. H. Tyrrell	8	1 0	420	..	30·80	166	145
D Kettering W.W. (Cransley)	Major J. P. Haugh	8	1 0	275	..	28·48	190	124
D Kettering (Sewage Works)	Major J. P. Haugh	8	1 0	199	..	27·30	189	129
D Kettering W.W. (Thorpe Malsor)	Major J. P. Haugh	5	1 0	352	..	28·56	211	128
D Kettering W.W. (Clover Hill)	Major J. P. Haugh	5	1 0	344	..	26·67	185	127
d Thrapston (Drayton House)	Mr. C. V. Craske	5	1 6	220	..	31·12	..	138
Rothwell (Loddington)	Mr. J. Oliff	5	1 0	400	..	29·91	..	..
D Tichmarsh Rectory	Rev. Canon A. M. Luckock*	5	1 0	170	..	25·78	197	124
D Rothwell (Shotwell Mill W.W.)	The Surveyor, U.D.C.	5	1 6	340	..	25·81	162	116
d Desborough Council School	F. W. Grudgings, Esq	5	1 0	400	..	30·55	..	..
D Desborough U.D.C. Waterworks	A. Harris, Esq., C.E.	5	0 9	457	..	27·48	176	124
d Barnwell (Lilford Hall)	Lord Lilford	5	1 0	..	..	25·75	..	115
d Oundle (Milton Road)	J. M. Siddons, Esq., C.E.	5	1 6	131	22·3	22·87	..	..
D Oundle School	The Headmaster	8	1 0	147	..	22·08	161	111
Peterborough (Woodston)	Central Sugar Co., Ltd.	5	0 7	35	..	22·78	..	..
D Peterborough (Westbourne Ho.)	E. H. Colman, Esq	5	1 0	35	..	24·42	172	116
D Peterborough (Abbeyfields)	Major J. Shipley Ellis	5	1 0	49	..	24·79	178	111
D Peterborough (Milton Park)	Mr. E. A. Parker	5	2 0	86	..	25·98	170	113
D Wittering (Whitewater)	E. Betts, Esq	8	1 0	241	..	27·55	156	120
D Wittering (Bone Mill)	E. Betts, Esq	8	1 0	..	..	28·06	166	124
D Eye (Northolm)	S. M. Egar, Esq	5	1 0	17	..	23·66	179	102
D Eye (Newborough)	R. Williams, Esq	5	1 0	8	..	25·53	163	111
5.—WELLAND. 96 sq. mi.								
D Market Harboro' (Dingley Hall)	Mr. V. Read*	5	1 6	406	..	31·07	190	147
D Weston-by-Welland	Major N. H. Matthews	5	1 3	254	..	30·87	199	149
D Rockingham Castle Gardens	Mr. C. Mears	5	1 0	450	..	28·59	164	123
D Gretton School	W. Leeson, Esq	5	1 6	365	..	25·09	197	115
d Easton-on-the-Hill	W. H. Tillson, Esq	5	0 7	290	..	25·16	..	..
D Market Deeping (Etton)	W. H. A. Court, Esq., C.E.	8	1 0	25	..	23·11	145	111
HUNTINGDONSHIRE. (Area, 366 sq. mi.)								
1.—OUSE. 327 sq. mi.								
D St. Neots (The Square)	Miss L. Sibley	5	0 10	50	..	24·72	190	127
D Hemingford Grey	G. F. Wilson, Esq	5	1 6	20	21·9	24·05	150	117
D Hemingford Grey School	W. T. Carter, Esq	5	1 0	23	..	23·53	153	120

* *Per* Northamptonshire Natural History Society.
† "Ground" is the roof of a reservoir 18 ft. above the general level.

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
HUNTINGDONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—OUSE—(*con.*).								
D St. Ives (Slepe House)	Dr. W. R. Grove	5	1 0	25	22·6	25·05	171	117
D Catworth (School House)	J. H. Annet, Esq.	5	0 9	210	23·7	23·76	183	127
d Wistow Rectory	Rev. C. C. Pratt	5	1 10	40	..	(26·61)	..	..
D Whittlesea Mere	L. I. Clark, Esq.	8	1 6	10	21·4	24·22	158	119
2.—NENE. 39 sq. mi.								
BEDFORDSHIRE. (Area, 467 sq. mi.)								
1.—THAMES—Colne. 20 sq. mi.								
Luton (Stockwood)	Capt. H. C. Ross-Skinner	5	1 0	539	..	27·67	182	131
2.—THAMES—Lea. 32 sq. mi.								
D Luton (Pumping Station)	J. W. Tomlinson, Esq., C.E.	5	1 0	343	25·9	27·86	171	134
D Dunstable (Cement Works)	Works Manager	8	1 0	430	..	27·40	179	128
D Luton (Wardown Park)	J. W. Tomlinson, Esq., C.E.	5	1 0	381	..	24·81	176	119
D Luton (The Downs)	G. W. Pryer, Esq.	5	1 0	479	..	25·50	152	126
3.—OUSE. 408 sq. mi.								
d Shefford (Stondon Manor)	R. Long, Esq.	5	1 0	241	..	22·85	..	124
D Hockliffe (Wistaria)	C. J. Kilby, Esq.	5	1 0	350	..	26·99	163	122
D Woburn (Experimental Farm)	Lawes Agricultural Trust	8	1 0	291	24·2	24·41	192	120
D Woburn (Fruit Farm, Ridgmont)	E. J. Hobbs, Esq.	5	1 0	270	..	24·67	172	124
D Letchworth (New Sewage Works)	The Surveyor, U.D.C.	5	1 0	195	..	23·88	154	115
D Stotfold (Three Co. Mental Hos.)	Dr. L. O. Fuller	5	1 0	220	23·2	23·00	172	116
M Meppershall	K. R. Reynolds, Esq.	5	0 9	235	..	21·33	..	..
W Shefford (Clifton Bury)	W. Inskip, Esq.	5	1 0	137	..	21·96	..	..
D Shefford Council School	G. F. Alldritt, Esq.	5	1 0	126	..	23·30	181	125
Shefford (Stanford)	H. Inskip, Esq.	5	1 0	90	..	20·76	..	..
Southill School	B. Perkins, Esq.	5	0 9	145	..	22·23	192	..
d Biggleswade (New Spring P.S.)	T. A. Staniforth, Esq.	5	1 6	180	..	21·50	..	..
D Cardington (+A)	The Meteorological Office	8	0 10	100	..	21·46	163	105
D Sandy (The Lodge)	Mr. R. Pettifer	5	1 0	200	..	23·02	155	127
D Sandy (Mogerhanger Park)	Dr. C. G. Welch	5	1 0	..	..	22·13	170	121
D Sandy (Sewage Works)	Sandy U.D.C.	5	0 8	75	..	20·79	159	118
D Bedford (Castle Road)	Miss M. E. Newbery	5	7 0	108	..	22·88	166	119
D Bedford (Bedford Park)	N. Greenshields, Esq., C.E.	8	1 3	117	..	22·53	161	115
Goldington (Castle Mills)	late W. H. Roberts, Esq.	5	1 4	90	..	22·53	..	..
D Great Barford House	J. Arnold Whitchurch, Esq.	5	1 0	120	..	23·68	172	121
d Carlton ("The Carlton" School)	The Headmaster	5	0 10	247	..	(25·58)	..	..
Sharnbrook (Castle Close)	L. Stileman-Gibbard, Esq.	5	1 0	210	..	23·78	205	128
4.—NENE. 7 sq. mi.								
CAMBRIDGESHIRE. (Area, 859 sq. mi.)								
1.—STOUR. 17 sq. mi.								
2.—OUSE. 741 sq. mi.								
D Ashwell (Odsey)	W. Herbert Fordham, Esq.	5	2 0	256	23·0	26·07	177	126
Litlington Vicarage	Rev. M. de Courcy-Ireland	8	1 0	120	..	27·46	153	121
d Bartlow (Castle Camps Sch.)	C. J. Keeble, Esq.	5	1 0	400	..	29·07	(257)	(138)
D Guilden Morden Vicarage	Rev. Ll. G. S. Price	5	1 0	140	21·9	23·14	166	121
Abington Pigotts Rectory	Rev. M. de Courcy-Ireland	5	1 0	78	21·8	24·95	164	109
D Melbourn (Melbourn Bury)	A. R. Fordham, Esq.	5	1 0	90	..	24·29	188	127
d Meldreth (Chiswick Farm)	A. A. Howard, Esq.	5	1 1	70	22·4	24·72	197	127
D Whittlesford (Scotts)	Robert Maynard, Esq.	5	0 6	68	22·3	23·39	..	..

DIVISION III—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CAMBRIDGESHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—OUSE—(*con.*)								
D Shelford (Stapleford House)	J. H. H. Linton, Esq.	5	2 3	64	22·3	24·15	153	128
D Balsham Rectory	Rev. H. J. E. Burrell	5	1 6	399	23·0	26·89	156	102
Long Stow	S. Welsford Pain, Esq.	5	1 0	240	..	(24·33)	..	..
D Grantchester (Lyndewode)	J. Nutter, Esq.	5	1 0	31	22·6	26·45	154	121
D Fulbourn (Fleam Dyke)	W. W. Gray, Esq., C.E.	5	1 0	99	21·0	21·82	163	114
D Fulbourn Pumping Station	W. W. Gray, Esq., C.E.	5	1 0	37	22·9	23·08	166	119
D Fulbourn (Cambridge Mental Hos.)	The Farm Bailiff	5	1 6	72	..	24·63	151	116
D Cambridge W.W. (Cherryhinton)	W. W. Gray, Esq., C.E.	5	1 0	35	21·6	23·45	155	111
Cambridge (Hills Road)	Smith Nutter, Esq.	8	0 10	45	23·8	26·70	197	140
D Cambridge (Corporation Store Yd.)	G. W. Teasdale, Esq., C.E.	5	1 8	52	21·2	23·46	151	117
D Cambridge (Botanic Gardens)	The Curator	5	1 1	41	21·8	23·79	144	123
D Cambridge (Corporation Ppg. St.)	G. W. Teasdale, Esq., C.E.	5	1 7	28	22·1	22·56	161	115
D Cambridge (University Farm)	The Director	5	1 0	81	..	25·05	136	118
D Caxton	Dr. E. P. H. Dudley	5	1 0	170	23·3	23·78	142	116
D Quy Hall	T. Musgrave Francis, Esq.	5	0 9	23	23·3	26·52	169	128
D Boxworth (Manor House)	E. H. Thornhill, Esq.	5	1 0	76	23·4	26·47	186	127
d Swaffham Prior Vicarage	Rev. L. Fisher	5	1 0	44	21·3	(23·24)	(162)	(118)
D Oakington	A. H. V. Bloom, Esq.	5	3 0	27	..	24·13	144	120
D Burwell (Manor House)	J. G. Faircliffe, Esq.	5	1 0	50	23·0	22·19	132	105
D Cottenham (Bernard House)	Miss K. Bull	5	1 6	30	22·1	25·95	181	120
D Conington (Conington Hill)	P. T. Gardner, Esq.	5	1 0	50	24·7	24·75	154	119
D Fordham (London House)	W. V. Bloom, Esq.	5	1 0	30	21·4	23·74	150	126
d Stretham (Orchard House)	Miss Wright	8	4 6	42	22·0	25·17	167	..
D Littleport (Highfield House)	H. G. Martin, Esq.	8	4 0	67	21·3	25·38	164	110
D Chatteris (Aylesby House)	P. A. S. Rushton, Esq.	5	1 6	31	22·5	23·16	149	113
d March	L. I. Clark, Esq	9	2 0	10	22·8	28·21	..	120
D Upwell (Marmont Priory Lock)	L. I. Clark, Esq	8	1 1	..	20·6	23·52	169	111
3.—NENE. 101 sq. mi.								
D Stanground Sluice	L. I. Clark, Esq.	8	1 6	15	20·3	24·11	176	127
D Parson Drove (Clows Cross)	W. Kingston, Esq.	8	1 0	6	22·1	26·09	181	117
D Wisbech (Horticultural Station)	W. G. Kent, Esq.	5	1 0	10	..	27·15	181	121
D Wisbech (Queen's Road)	C. Dann, Esq	5	1 6	10	26·3	25·75	181	123
d Wisbech (Tydd Manor)	A. H. Carter, Esq.	5	6 6	..	..	24·78	..	127

DIVISION IV—EASTERN COUNTIES.

ESSEX. (Area, 1,532 sq. mi.)

1.—THAMES.—Lea. 132 sq. mi.								
D West Ham (Abbey Mills)	London County Council	8	0 10	15	..	25·81	154	123
D Leyton (Sewage Works) (+A)	A. P. Howell, Esq., C.E.	5	0 9	22	..	26·25	171	125
D Leytonstone (High Road)	Miss G. Lister	5	1 3	100	..	28·43	214	130
D Lea Bridge (Waterworks)	Met. Water Board	5	0 6	23	..	25·21	144	129
D Walthamstow (Ferry Lane)	Met. Water Board	5	0 6	40	23·9	25·66	171	130
D Woodford (Haggar Lane)	Met. Water Board	8	0 8	176	..	27·33	165	126
D Buckhurst Hill Reservoir	Met. Water Board	8	1 6	275	..	27·93	164	133
D Buckhurst Hill (Ardmore)	Miss E. F. Howard	8	1 0	270	..	30·46	174	145
D Chingford (Crescent Road)	Miss M. L. Mathieson	5	0 10	200	..	26·82	173	130
D Chingford Mill	Met. Water Board	8	0 6	40	..	24·41	157	130
D Loughton (High Beech Res.)	Met. Water Board	5	0 8	376	..	30·07	165	136
D Waltham Abbey (Rammey Marsh)	Met. Water Board	8	1 0	60	..	24·98	169	131
D Waltham Abbey (Pumping Sta.)	Met. Water Board	5	2 0	66	..	24·80	159	132
d Waltham Abbey (Gunpr. Fact.)	The Superintendent	5	1 0	64	..	24·79	..	..
D Hatfield Broad Oak (Barrington)	A. H. Gosling, Esq.	5	0 10	300	..	25·49	195	140
Bishop Stortford (Hassobury)	Major W. S. Gosling	5	0 10	290	..	27·78	172	..
D Stansted (Birchalls)	Mr. W. White	5	1 0	290	..	29·77	185	164

DIVISION IV—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ESSEX—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—THAMES—Lea—(*con.*)								
D Elsenham (Gaunts End)	H. Cotterill, Esq.	5	1 0	363	24·6	27·23	189	139
D Stansted (Hargrave Park)	Arthur Alder, Esq.	5	1 7	..	..	28·42	162	126
D Stansted (Bentfield Place)	L. D. Gosling, Esq.	5	0 9	300	..	27·50	190	136
2.—THAMES—Roding, etc. 316 sq. mi.								
d Grays (Sewage Works)	The Manager	8	1 0	7	..	(24·09)	(168)	(129)
D Tilbury (Park View Observatory)	S. A. Hill-Willis, Esq., C.E.	5	1 0	6	..	23·40	124	106
D Grays (Stanley Road)	Grays U.D.C.	5	3 3	21	..	23·66	131	112
D Rainham (Riverside Sew. Works)	Dagenham U.D.C.	8	1 0	5	..	20·26	152	107
D East Ham (Central Park)	Public Health Dept.	12	1 0	15	..	26·32	168	122
D East Ham Well	Met. Water Board	5	1 0	17	..	24·69	173	126
D Dagenham Sanatorium	The Medical Superintendent	5	1 0	18	..	20·60	159	117
D Forest Gate (Monega Road)	C. E. Golding, Esq.	5	0 11	20	..	25·96	182	127
D Ilford Sewage Works	The Borough Engineer	5	1 0	31	..	25·24	145	114
D Leigh (Brick House)	Miss I. Bentall	5	0 10	136	..	21·63	139	108
D South Benfleet (Hillside Road)	H. A. Marshall, Esq.	5	1 0	55	..	21·65	169	130
d Vange Pumping Station	Southend Water Works Co.	5	1 0	43	..	20·50	..	..
d Manor Park (City of L'dn. Cemy.)	The Superintendent	5	0 6	50	..	26·22	146	131
w Pitsea Pumping Station	Southend Water Works Co.	5	1 0	28	..	23·70	..	..
D Horndon (Eastern Sew. Works)	W. J. Grant, Esq.	8	1 6	23	..	20·64	163	116
D Hornchurch	Hornchurch U.D.C.	8	1 6	44	..	22·26	165	122
D Wanstead (Red Bridge)	Met. Water Board	5	0 6	45	..	25·43	159	125
D Wanstead (Nightingale Farm)	J. J. Barker & Sons	5	0 9	94	..	28·82	145	120
D Havering-atte-Bower (Fernside)	Benjamin Smith, Esq.	5	1 0	340	..	27·92	194	141
d Theydon Bois (Birch Hall)	Mrs. Gerald Buxton	5	1 0	300	..	(28·90)	..	..
d Theydon Bois (Fernside)	C. W. Browne, Esq.	5	0 11	300	..	26·99	..	..
D North Weald (Canes)	H. W. Hart, Esq.	5	1 0	250	..	25·89	152	127
3.—CROUCH. 186 sq. mi.								
D Shoeburyness (New Ranges)	The Meteorological Office	8	1 0	11	18·9	21·51	156	107
D Southend (The Cliffs)	The Pier Master	8	1 0	90	19·7	22·46	178	110
D Southend (Kilworth Avenue)	H. J. G. Ralph, Esq.	8	1 0	78	..	23·47	186	127
D Southend (Waterworks)	Southend Water Works Co.	8	1 0	112	21·1	22·09	177	119
D Westcliff-on-Sea	Messrs. Boatman, F.S.M.C.	5	1 0	100	..	21·26	187	114
d Leigh Reservoirs	Southend Water Works Co.	5	1 0	177	..	22·92	..	..
D Great Wakering	The Meteorological Office	5	1 0	11	18·4	22·71	163	106
D Little Wakering Vicarage	Rev. B. S. Mercer	5	1 0	15	..	23·48	153	124
D Eastwood Pumping Station	Southend Water Works Co.	8	1 0	50	..	22·98	189	126
D Thundersley Reservoir	Southend Water Works Co.	5	1 0	277	..	21·74	177	125
w Nevendon Pumping Station	Southend Water Works Co.	5	1 0	43	..	21·17	..	..
D Billericay (Service Tank)	Southend Water Works Co.	5	1 0	310	..	20·15	159	116
D Billericay (Ramsden Hall)	T. W. Bacon, Esq.	5	0 9	260	..	25·00	175	132
d Wickford (Runwell Hall)	Miss A. Kemble	5	0 7	75	24·2	25·24	..	..
D Southminster (Dudswell)	Mrs. H. G. Owen	5	0 10	60	..	22·56	161	124
d Southminster (The New Moor)	E. J. Attenborough, Esq.	..	..	..	..	21·01	..	113
D Bradwell-on-Sea (Bradwell H.)	H. D. Chillingworth, Esq.	5	4 0	27	20·7	22·96	148	119
4.—BLACKWATER. 425 sq. mi.								
D Shenfield (The Lodge)	Harcourt P. Landon, Esq.	5	1 0	305	..	24·68	158	118
D South Hanningfield (Bearmains)	C. W. Gardner, Esq.	8	1 10	220	..	23·08	161	123
D Ingatestone (Trueloves)	W. Ransom, Esq.	5	1 0	249	..	25·59	159	126
D Ingatestone (Fryerning)	A. E. Christy, Esq.	5	0 9	290	..	26·19	218	130
D Maldon	Town Clerk	5	1 0	14	..	20·43	169	118
D Writtle (Melbourne)	J. A. Rosling, Esq.	5	0 9	140	..	27·09	189	129
D Chelmsford (County Laboratory)	East Anglian Inst. Agric.	5	1 0	140	22·3	23·67	184	130
D Chelmsford(High Street)	Miss F. J. Chancellor.	8	1 6	98	22·5	26·24	177	130
D Langford (Treatment Plant)	Southend Water Wks. Co.	8	1 5	40	..	22·53	187	125
d Witham (Wickham Hall)	D. B. Smith, Esq.	5	0 10	60	..	20·77	..	..
D Good Easter	East Anglian Inst. Agric.	5	1 0	185	..	23·45	170	128
d Wickham Bishops	Mrs. Fowler	5	1 4	250	..	21·63	(160)	(122)
D Pleshey Vicarage	Rev. C. H. B. Woodd, M.A.	8	1 3	200	..	23·73	185	131

DIVISION IV—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ESSEX—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—BLACKWATER—(*con.*)								
Witham (Faulkbourne Hall)	Miss C. L. Parker	5	1 0	100	..	22·63	179	133
d Little Leighs (Lavender Leez)	W. C. Neild, Esq	5	1 2	192	..	23·26	..	125
D Messing Vicarage	Rev. W. G. Whittam	5	2 1	120	..	23·39	182	123
D Kelvedon (Lawn House)	F. Randolph-Symmons, Esq.	5	1 0	96	..	23·31	168	125
D Kelvedon (White Barn)	Messrs. W. & H. J. Sheldrake..	5	1 5	135	..	24·30	177	133
D Blacknotley (Lynderswood Ct.)	Sir J. G. Broodbank	5	1 0	245	..	24·23	153	133
D Felsted School	E. H. Lockwood, Esq	5	0 10	248	*22·9*	23·80	154	126
D Great Dunmow	Messrs. Hasler & Co., Ltd..	5	1 0	200	..	24·06	162	129
D Rayne (Staneway)	Mrs. Burt	5	1 1	247	..	25·62	159	130
D Great Saling (Woolpits)	Mrs. Joseph Smith	5	0 9	284	..	24·61	188	129
D Shalford (Littles)	W. F. Hart, Esq	5	1 0	280	..	25·69	162	134
D Great Bardfield (South Lodge)	A. W. Brunwin, Esq	5	1 0	250	..	25·71	175	132
5.—COLNE & C. 283 sq. mi.								
d St. Osyth (Wigborough Wick)	P. B. Smith, Esq	..	1 6	10	..	23·84	..	..
D Clacton-on-Sea	The Town Clerk	8	1 0	55	19·3	24·59	161	121
D Great Clacton (Clay Hall)	Miss E. A. Smith	5	1 0	45	..	26·76	163	121
D Tiptree (Oxley Hill)	H. Campkin, Esq	5	0 9	100	..	22·45	186	134
D Tiptree (Brook House)	A. Hitchcock, Esq	5	0 11	120	..	23·55	142	124
D Layer Breton (The White House)	E. H. Barritt, Esq., J.P.	5	1 0	89	..	23·19	197	123
D Walton-on-the-Naze	The Town Clerk	5	1 0	66	..	24·70	143	126
D Colchester (King's Ford)	Cmdr. E. A. Digby, R.N., K.C.	5	1 4	103	..	23·20	140	126
D Colchester (Hythe Gas Works)	Colchester Gas Co	8	0 10	12	..	22·76	218	118
D Colchester (Boro' Surveyor's Off.)	H. Collins, Esq., C.E.	8	1 2	87	..	25·57	183	137
D Colchester (Waterworks)	A. Hammond, Esq	5	1 5	37	..	23·28	185	128
D Lexden (Hill House, S. No. 2)	S. F. Hurnard, Esq	5	1 0	90	..	25·12	187	125
D Great Bromley (Broughton)	W. A. Roberts, Esq	5	1 0	115	..	24·84	167	123
D Earls Colne (Grammar School)	G. R. Hill, Esq	5	1 0	168	..	23·09	172	124
d Earls Colne (Colne House)	late Lieut-Col. T. G. C. Reynolds	5	1 0	180	..	(24·46)	(182)	(131)
D Halstead (Attwoods)	R. E. Vaizey, Esq	5	1 0	200	..	25·76	178	132
D Halstead (The Brewery)	F. N. Adams, Esq	5	1 0	139	..	25·59	170	127
Gt. Maplestead (Monk's Hall)	Miss J. Miller	5	0 9	260	..	22·57	..	..
D Great Yeldham Hall	G. A. Goodchild, Esq	5	2 0	200	..	26·57	185	130
6.—STOUR. 110 sq. mi.								
D Dovercourt	The Borough Surveyor	5	1 0	47	..	23·65	147	111
D Mistley (The Maltings)	Messrs. Brooks (Mistley) Ltd.	..	..	..	..	25·41	185	119
D Sudbury (Bulmer Lodge)	Miss M. A. Burke	5	1 3	202	25·6	26·28	168	129
7.—OUSE. 80 sq. mi.								
d Widdington Rectory	Rev. Jas. W. Court	5	1 6	340	..	25·71	..	120
D Great Chesterford Mills	E. H. King, Esq	5	1 0	130	..	25·68	166	119
SUFFOLK. (Area, 1,489 sq. mi.)								
1.—STOUR. 271 sq. mi.								
D East Bergholt (Ackworth Ho.)	A. Harwood, Esq	8	1 6	145	..	24·61	201	125
D Capel St. Mary School	Bernard B. Taylor, Esq.	5	1 6	156	..	27·28	169	125
D Assington Hall	Mr. E. J. Ottaway	5	1 0	200	..	24·71	177	124
D Great Cornard (The Limes)	E. Oliver, Esq	5	0 9	85	..	24·69	163	115
D Sudbury (Friars St.)	E. Ransom, Esq	5	1 6	93	..	25·99	212	131
D Hadleigh (Penlands)	E. A. Lee, Esq	5	1 0	185	..	27·42	181	137
d Waldingfield (Holbrook Hall)	Mrs. Frank Ramsay	5	1 1	185	..	(26·68)	..	..
D Clare (Nethergate House)	Lt.-Col. R. C. Bond, D.S.O.	5	1 8	130	..	26·84	167	121
D Hawkedon Rectory	Rev. B. P. Oakes	5	2 5	303	25·0	30·03	205	137
2.—ORWELL. 166 sq. mi.								
D Ipswich (Rookwd., Copdock) (+A)	F. L. Bland, Esq	8	1 0	164	*24·5*	27·61	174	129
D Ipswich (Roundwood)	Alfred G. Glenn, Esq	5	1 0	145	..	26·59	177	118

DIVISION IV—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SUFFOLK—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—ORWELL—(*con.*)								
d Ipswich (Museum)	F. M. Cullum, Esq.	8	1 0	164	..	26·61	..	..
D Ipswich (All Saints' Vic.)	Rev. S. C. Calver	5	1 5	..	..	27·04	185	130
D Ipswich (Dale Hall)	Percy Turner, Esq.	8	1 0	135	..	26·14	175	121
Elmsett (Laurel Cottage)	A. E. Ladbrook, Esq.	5	2 0	210	..	28·58	..	..
d Nettlestead (High Hall)	A. S. P. White Cooper, Esq..	5	1 6	236	..	29·65	..	131
D Coddenham (Shrubland Park)	Mr. A. C. Horton	5	1 6	162	..	28·14	174	144
D Gosbeck (Hall Farm)	A. A. Geater, Esq.	5	1 3	200	..	27·19	214	135
D Stowmarket	Capt.F.Creagh-Osborne,C.B.	5	1 0	117	..	27·99	173	122
D Haughley (Haughley House)	Mrs. S. H. Creagh	5	0 9	180	..	24·76	162	115
3.—DEBEN & C. 466 sq. mi.								
D Felixstowe Aerodrome..(+A)	The Meteorological Office...	8	1 0	15	..	21·87	168	110
D Waldringfield	Major B. R. M. Glossop....	8	1 6	70	..	27·59	165	127
D Woodbridge Abbey	Col. R. J. Carthew	8	1 2	46	..	29·30	197	133
D Orford (The Gables)	Miss E. A. Rope	5	1 1	30	..	24·39	194	127
Melton (Greylands)	Miss Jervis-White-Jervis...	5	1 6	50	..	29·14	180	124
D Melton (St. Audrey's Hospital)	A. F. Philpott, Esq.	8	1 2	74	..	29·55	200	121
D Melton (Bromeswell Rectory)	Rev. F. Shadwell	5	1 5	35	..	27·84	185	127
D Henley Hall	Mrs. Gascoigne	5	2 0	150	..	29·11	202	153
D Rendlesham Hall	Mr. H. Long	5	1 6	88	23·1	30·27	158	123
D Campsea Ashe (High House)	Viscount Ullswater, G.C.B..	8	1 0	60	..	30·91	176	140
D Aldeburgh (Sanditon)	Miss L. Austen-Leigh	..	..	..	..	24·18	171	126
Charsfield (Red House)	Hugh P. Youngman, Esq...	5	1 9	150	..	30·09	..	..
D Blaxhall	R. H. Sherwood, Esq.	8	1 0	..	..	28·78	178	127
D Pettaugh (Laffitte Hall)	W. B. Damant, Esq.	5	1 6	190	..	31·46	182	150
D Snape (Green Heys)	Mrs. G. H. Garrett	5	1 1	100	..	32·59	174	144
D Snape (Wadd House)	Capt. E. H. Buxton	5	1 0	25	..	32·01	176	139
D Leiston (Lower Abbey)	Miss M. K. Rope	5	0 7	30	..	27·92	159	129
D Southwold (Quay House)	Miss P. Corns	5	1 1	30	..	25·80	153	130
D Halesworth Rectory	Rev. H. C. Newbery	5	1 0	50	..	29·74	192	146
D Halesworth (Estate Office)	G. W. Stanford, Esq.	5	1 5	120	..	29·20	181	151
D Wangford (Ford House)	Hon. Agnes Eden	5	0 10	25	..	29·54	169	133
D Wrentham (Sotterley Hall)	F. W. C. Chartres, Esq.	5	0 10	70	..	28·51	188	135
4.—YARE & C. 208 sq. mi.								
D Horham Rectory	Rev. J. E. Soden	5	1 3	175	..	31·93	188	147
D Oakley	R. L. T. Clarkson, Esq.	5	1 0	75	..	(32·49)	214	132
D Rumburgh Vicarage	Rev. W. Linton Wilson....	5	1 0	187	..	26·44	216	133
D Bungay (Flixton Hall)	Sir Shafto Adair, Bart.	5	1 0	79	..	26·38	181	135
D Lowestoft (Secondary School)	R. Robertson, Esq.	5	1 0	82	23·5	26·51	190	132
D Lowestoft (Briar Clyffe)	H. Hollingsworth, Esq.	5	0 7	..	..	26·91	178	135
Blundeston House	L. J. Peto, Esq.	..	..	30	..	29·20	..	..
D Herringfleet House	G. H. Wyllys, Esq.	5	1 0	55	..	24·94	204	140
d Lound School	Miss F. B. Bartlett	5	0 6	40	..	23·88	..	..
D Lound Pumping Station	Lowestoft Water & Gas Co..	8	1 0	34	..	28·96	169	135
D Hopton (Hopton House)	C. S. Orde, Esq.	5	1 0	..	..	27·99	160	127
D Fritton Warren	Maj.-Gen. R. Upcher, D.S.O.	5	1 0	42	..	29·93	192	144
D Fritton Hall	Major A. R. Buxton	8	0 11	30	..	29·06	208	143
D Yarmouth (Burgh Hall)	H. P. Frederick, Esq.	5	1 0	40	*24·4*	28·93	191	137
5.—OUSE. 378 sq. mi.								
d Newmarket (Sewage Outfall)	W. H. Eley, Esq., C.E....	5	1 0	81	..	25·27	..	109
D Bury St. Edmunds (Northgate St.)..	Rev. J. S. Pratt	5	1 0	100	..	26·11	186	127
d Bury St. Edmunds (Whiting St.)..	Rev. H. I. Kilner	8	0 10	..	..	28·66	..	..
D Bury St. Edmunds (Westley H.)...	Mrs. Burrell	5	1 6	226	25·1	28·41	162	130
d Bury St. Edmunds (Beet Sugar Factory)..	United Sugar Co., Ltd.	5	0 6	159	..	22·55?	..	..
D Fordham St. Martin	Mr. H. Parker	5	1 0	125	..	24·37	145	110
d Hengrave Hall	Sir John Wood, Bart.	5	1 5	85	23·1	24·95	..	109
D Bury St. Edmunds (Troston Hall)..	F. S. Beauford, Esq.	5	1 0	130	..	25·60	167	120
D Mildenhall	H. R. W. Forster, Esq.	5	1 3	50	..	24·73	163	115
Barningham (The Beeches)	Miss A. K. Lingwood	5	0 9	136	..	27·41	..	..
D Elveden Hall	The Earl of Iveagh, C.B.	5	1 0	130	..	26·30	210	134

DIVISION IV—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
NORFOLK. (Area, 2,044 sq. mi.)								
1.—YARE. 658 sq. mi.		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
D Diss (The Cedars)	Dr. H. M. Spiers	5	0 8	108	..	27·21	177	131
D Pulham St. Mary (Brook House)	E. Beevor, Esq.	5	1 1	120	..	27·48	192	127
D Pulham St. Mary (Hill House)	W. G. Rutter, Esq.	5	1 0	120	24·7	30·42	226	158
D Denton Rectory	Rev. Canon T. H. Bindley	5	0 10	50	23·4	30·02	205	145
D Ditchingham	W. G. Rutter, Esq.	5	1 0	25	23·9	27·49	225	140
D Beccles (Raveningham Hall)	N. H. Bacon, Esq.	8	1 0	60	24·6	30·20	180	126
D Hapton Parsonage	Lt.-Col. H. C. Copeman	5	1 0	100	..	29·55	189	144
D Spooner Row (Wattlefield Hall)	E. F. Routh Clarke, Esq.	5	1 0	161	..	29·19	187	141
D Lodden (Chedgrave Manor)	C. E. Dupuis, Esq.	5	1 6	17	24·2	28·59	195	139
D Wymondham (Morley School)	T. E. Ormond, Esq	5	1 0	157	25·3	28·31	225	136
D Wymondham	J. B. Pomeroy, Esq.	8	1 3	118	..	27·68	176	127
D Hingham	F. B. Law, Esq.	5	1 0	193	25·1	28·89	193	128
D Ketteringham	Lt.-Col. R. F. Boileau	5	1 0	135	..	29·53	199	137
D Keswick Old Hall	E. Knight, Esq.	5	1 0	90	26·4	30·76	213	142
D Gorleston Coastguard Station	The Meteorological Office	8	1 0	16	24·5	28·72	182	136
D Norwich (Claremont Road)	W. S. Tillett, Esq.	8	1 0	100	..	28·18	210	140
D Norwich (Eaton)	late A. W. Preston, Esq.	5	1 0	98	26·5	28·89	200	136
D Norwich (Carrow Abbey Gar.)	The Misses Colman	5	1 0	40	25·2	28·45	178	144
D Norwich (Ipswich Road)	J. H. Willis, Esq.	5	1 0	110	..	27·65	204	139
D Norwich (Heigham Cemetery)	L. Alan Jewell, Esq.	5	1 2	37	25·5	28·44	191	136
D Thorpe St. Andrew (Pine Banks)	H. J. Jarrold, Esq.	5	1 7	140	..	28·41	192	138
Norwich (Marlingford Hall)	Major E. H. Evans-Lombe	5	1 0	50	26·9	31·29	165	..
D Sprowston (Oak Lodge)	A. Cozens Hardy, Esq.*	5	1 0	100	25·2	29·77	212	138
d Drayton Hall	C. H. Walter, Esq.	5	1 0	..	26·0	28·19	..	132
D Swanton Morley Rectory	Rev. R. N. Usher	5	1 0	105	24·3	31·37	188	141
D Bylaugh Park	Mrs. Rice	5	1 0	..	24·8	32·07	183	137
D Swanington (Heath House)	P. Norgate, Esq.	5	2 3	101	25·6	29·40	202	141
D East Bilney Hall	K. W. Hervey, Esq.*	5	1 0	140	26·6	33·58	178	136
D Cawston Rectory	Rev. T. H. Marsh	5	1 0	120	26·6	33·67	217	139
2.—YARE—Bure & C. 368 sq. mi.								
D Acle	Miss Davie*	5	0 6	51	25·1	30·54	204	146
D Sprowston (The Church Farm)	H. B. Cowell, Esq.	5	1 0	93	..	30·41	181	133
D Yarmouth (Ormesby St. Michael)	Gt. Yarmouth W.W. Co.	8	1 0	22	26·2	29·35	186	141
D Coltishall (Manor House)	F. A. Bainbridge, Esq.	5	1 6	25	25·5	29·59	194	135
D Wroxham (Hoveton Hall)	G. F. Buxton, Esq., C.B.	5	1 0	25	26·5	31·32	217	146
d Barton Turf Hall	J. M. Wood, Esq.	8	0 10	40	..	27·39	..	127
D Aylsham (Rippon Hall)	Major H. S. Marsham	5	0 7	90	26·4	33·44	167	137
D Worstead (Lyngate Cottage) (+A)	Miss F. E. Hooper	8	1 3	50	26·5	28·42	198	142
D Hindolveston (School House)	Owen Potter, Esq.	5	1 0	300	..	34·54	223	160
D Colby School	John Blott, Esq.	5	1 0	50	..	33·63	211	145
D North Walsham (The Paston Sc.)	Major P. Pickford	5	1 0	100	..	29·50	193	136
D Walcott-on-Sea	Lt.-Col. R. S. Hunt, D.S.O.	5	1 0	20	..	26·36	170	135
D Swafield Rectory	Rev. H. Muir	5	0 10	100	25·5	29·95	192	137
d North Walsham (Gunton Park)	Lord Suffield	8	1 3	105	25·9	30·47	..	127
D Cromer (Northrepps Hall)	Lt.-Col. C. R. Gurney	5	1 2	225	26·7	29·50	184	135
D Hanworth Rectory	Rev. Wilson W. White	5	0 10	..	..	32·14	193	149
3.—STIFFKEYS & C. 290 sq. mi.								
D Sandringham House Gardens	Mr. T. H. Cook	5	0 9	121	27·0	28·84	207	150
D Syderstone (The Rectory)	Rev. B. D. Reed	5	1 0	210	..	29·22	190	147
D Melton Constable Park	W. F. Baker, Esq.	8	0 11	287	..	33·86	160	140
D Cromer (The Warren)	F. H. Barclay, Esq.	5	1 0	101	24·1	27·16	169	136
D Cromer (Gas Works)	Cromer U.D.C.	5	1 0	196	24·4	27·16	190	127
D Langham Episcopi Vicarage	Rev. John H. Toy*	5	0 6	139	23·2	26·73	203	143
D Sheringham Hall	Miss E. Upcher	5	0 9	130	23·6	27·76	201	133
D Sheringham (Skelding)	F. Hall Smith, Esq.	8	1 0	60	..	32·02	215	152
d Wells (Holkham Hall)	Earl of Leicester, G.C.V.O.	5	0 3	43	23·1	29·40	(181)	(132)
D Hunstanton	H. B. Belding Esq.	5	1 1	105	..	21·63	165	119

* *Per* Norfolk Rainfall Organisation.

DIVISION IV—EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	NORFOLK—(*con.*)								
	4.—OUSE & C. 709 sq. mi.		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
D	Garboldisham Manor	Major E. W. Denny, D.S.O..	8	1 0	70	23·2	26·44	196	128
d	Thetford (Ford Street Gdns.)	Mr. A. Pipe	5	1 0	44	23·4	25·37	..	126
D	Thetford (Kilverstone Hall)	Baron Fisher of Kilverstone	8	1 0	70	21·7	25·43	192	128
D	Thetford (Waterworks)	C. W. Holmes, Esq.	8	1 0	165	23·8	26·36	159	126
d	Attleborough (Quidenham Hall)	Earl of Albemarle	5	1 0	100	24·1	27·36	..	128
D	Hargham Hall	Sir H. R. Beevor, Bart., M.D.	8	0 6	100	24·9	27·04	176	130
d	Methwold (Dyke House)	late Earl Russell	5	1 0	30	..	26·88	..	119
D	Caston (Flaxmoor)	Lt.-Col. T. S. N. Hardinge..	5	1 1	150	..	26·40	209	129
D	Watton	A. A. Gompertz, Esq.	5	1 0	166	25·7	28·62	196	140
D	Great Cressingham	J. W. Montgomery, Esq.	5	1 0	90	..	30·71	229	147
D	Downham (Dial House)	Messrs. T. H. Wenn & Co.	5	1 6	..	..	24·30	155	109
D	Downham (High Street)	J. M. Jackson, Esq.	5	1 3	16	..	24·75	166	123
d	Outwell (Well Creek Sluice)	L. I. Clark, Esq.	8	2 6	16	22·0	25·50	..	128
d	Wallington Hall	J. L. Luddington, Esq.	5	1 0	58	23·7	29·76	..	110
D	Swaffham (The Villa)	Mr. J. H. Mack	5	0 9	246	26·3	32·88	173	138
d	Swaffham	Messrs. Vynne & Everett, Ltd.	5	2 7	210	..	30·63?	..	..
D	Sporle	T. S. Matthews, Esq.	5	4 0	230	..	33·11	221	145
D	Little Dunham (Dunham Cott.)	A. G. Copeman, Esq.	5	0 11	265	*27·2*	33·98	215	138
D	Wiggenhall (St. Germans Sluice)	L. I. Clark, Esq.	8	1 6	..	23·1	29·95	181	144
d	East Winch (Holland House)	J. C. Cottam, Esq.	5	1 6	55	23·3	29·23	..	..
D	Gayton Waterworks	J. C. Matthew, Esq., C.E...	5	1 0	131	..	29·53	180	132
d	King's Lynn (Manure Works)	J. Brown, Esq.	5	1 2	10	..	27·57	..	..
D	Tittleshall	Capt. H. G. Buxton	5	1 6	285	26·8	30·69	177	138
d	Grimston (School House)	J. R. Steward, Esq.	5	1 2	62	..	31·02	..	..
	5.—NENE. 19 sq. mi.								
D	Emneth (Inglethorpe Manor)	F. M. Bland, Esq.	5	1 0	6	22·4	26·83	176	133

DIVISION V—SOUTH-WESTERN COUNTIES.

WILTSHIRE. (Area, 1,375 sq. mi.)

	1.—LOWER AVON. 386 sq. mi.								
D	Westbury (Cambridge House)	Dr. W. K. A. Richards	5	1 0	190	..	34·93	192	147
D	Westbury (The Vicarage)	K. E. Alexander, Esq.	5	1 0	181	..	34·33	204	150
D	Market Lavington (Old House)	Miss A. Pleydell Bouverie..	5	0 9	290	29·0	30·10	189	151
d	Gt. Cheverell (Timoleague)	Rev. H. S. Travers	5	0 6	360	..	33·44	..	..
D	Trowbridge (Town Hall)	The Engineer	8	1 2	131	..	28·81	190	145
D	Bradford (Winsley Manor)	E. W. Knatchbull, Esq.	5	0 8	400	29·9	32·52	202	153
D	Bradford (Manvers House)	Dr. C. E. S. Flemming	5	1 3	130	29·9	30·76	191	153
D	Seend (Cleeve House) (R)	Lt.-Col. W. C. Heward Bell.	8	1 0	160	27·5	29·79	208	148
D	Holt (The Retreat)	A. V. H. Beaven, Esq.	5	1 0	145	30·3	32·38	192	160
d	Devizes (Wilts Co. Mental Hospl.)	Dr. S. J. Cole	8	2 3	385	28·0	30·48	..	..
D	Devizes (Broadleas)	W. H. L. Ewart, Esq.	5	1 0	400	..	32·24	231	147
D	Devizes (Highclere)	H. W. Green, Esq.	5	1 6	450	28·3	32·51	199	147
d	Rowdiford Gardens (R)	Mrs. R. E. S. Thomas	8	2 0	..	..	32·91	..	..
D	Great Chalfield	Major R. F. Fuller	5	1 2	165	28·6	31·60	182	152
D	Little Chalfield	Mrs. T. H. Baker	5	1 0	180	..	31·18	212	152
D	Calne (Castleway)*	E. W. Brown, Esq.	5	1 0	250	28·9	33·13	180	150
	Calne (Compton Bassett Gdns.)	Mr. H. Welch	5	0 10	384	30·7	32·25	181	147
	Chippenham (Kington Langley)	Mrs. Charles Garnett	8	1 0	172	30·3	32·51	..	..
D	Grittleton	Lt.-Col. Sir A. D. Neeld, Bt., D.L., C.B.	..	..	..	..	34·53	193	158
D	Wroughton (Bassett Down Ho.)	Mrs. Arnold Forster	5	1 0	500	29·8	31·13	173	139
D	Tockenham Manor (R)	Major G. J. Buxton	8	2 0	400	..	28·29	193	142

* Formerly known as High Street.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WILTSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—LOWER AVON—(*con.*)								
w Luckington Court	Col. Sir E. Johnson-Ferguson, Bt.	5	0 8	400	30·2	30·40	..	..
D Malmesbury (Burton Hill Ho.)	H. L. Storey, Esq.	8	6 6	250	..	28·27	203	150
D Malmesbury (Lea House)	Rev. H. Milnes-Walker	5	1 6	260	..	28·60	160	144
D Malmesbury (Easton Grey)	Mr. P. A. Day	5	1 0	355	31·6	31·70	180	158
2.—STOUR. 33 sq. mi.								
D Mere (Charnage)	A. R. White, Esq.	5	1 0	426	33·8	37·21	214	162
D Stourhead	Sir H. H. A. Hoare, Bart.	5	1 0	583	38·1	41·58	204	175
Kilmington Rectory	Rev. H. G. Fox Strangways.	5	1 6	710	39·8	43·80	238	182
3.—EAST AVON. 554 sq. mi.								
D Longford Castle Gardens	The Earl of Radnor	5	1 0	139	31·4	33·65	221	152
D Salisbury (Harnham)	E. F. Taunton, Esq., Junr.	5	1 0	..	..	32·74	208	158
D Fonthill House Gardens	Hugh Morrison, Esq.	5	1 0	400	37·8	38·80	188	159
D Salisbury (Sewage Works) (+A)	H. V. Overfield, Esq., C.E.	5	1 0	153	29·7	30·66	191	141
D Salisbury (Manor Road)	Miss L. C. D. Awdry	5	1 0	250	29·2	32·51	211	158
D Salisbury (Atherton House)	Wilfrid Fletcher, Esq.	5	1 0	250	30·4	29·79	205	137
d Salisbury (Newlands)	Dr. T. W. Newton Dunn	5	1 0	175	..	31·90	..	..
D Stratford-sub-Castle (Manor Ho.)	Miss F. Carpenter	5	0 9	168	28·3	30·01	196	149
D Woodford Vicarage	Rev. M. I. Holme	5	0 10	200	..	32·11	223	156
D Porton (W.D. Exp'l. Stn.) (+A)	Meteorological Office	5	1 0	363	27·8	29·16	186	135
D Steeple Langford (Woodstock)	Miss A. J. Powell	5	1 0	257	..	34·21	211	146
d Maiden Bradley House	The Duke of Somerset	5	1 0	620	38·4	41·62	..	159
D Maiden Bradley	R. Luff, Esq.*	4	3 0	600	..	38·60	192	170
D Heytesbury	Dr. Hammond T. Hinton	5	1 0	300	31·7	30·87	194	148
d Warminster (Henford)	Mrs. Robinson	5	1 8	400	..	(35·85)	..	..
D Larkhill (School of Artillery (+A)	The Meteorological Office	5	1 0	440	26·5	29·96	198	136
D Warminster (Smallbrook Ho.)	G. E. Vicary, Esq.	5	0 8	420	..	33·93	194	146
D Orcheston St. Mary Vicarage	Mrs. Smith	5	0 9	285	..	31·41	193	152
d Marlborough (Wilcot Manor)	Lady Ernest St. Maur	5	1 0	..	..	32·25	..	..
D Bishops Cannings	A. J. Combes, Esq.	5	1 0	446	30·3	34·61	232	160
4.—TEST. 77 sq. mi.								
D Landford (Northlands)	Cedric R. Boult, Esq.	5	1 0	180	30·7	33·63	192	151
D Redlynch Grange	Maj. E. Fitz-Herbert Wright	5	1 0	300	..	35·45	202	154
West Grimstead	W. W. Wadsworth, Esq.	5	0 8	250	..	29·07	..	..
D Ludgershall (Conholt Park) (R)	E. A. Wigan, Esq.	8	1 0	800	33·9	32·33	176	140
5.—THAMES—Kennet. 169 sq. mi.								
D Bishops Cannings (Shepherds Shore)	C. G. Barrett, Esq.	8	2 1	564	..	32·71	180	138
D Marlborough College	W. F. Harling, Esq.	5	1 0	424	31·1	32·66	200	141
Marlborough (Salisbury Road)	E. Kinder, Esq.	5	1 11	450	..	33·13	..	..
d Aldbourne (Manor House)	W. Brown, Esq.	5	0 11	435	..	(31·91)	(209)	(141)
D Aldbourne (Upham House)	Lady Currie	5	1 2	580	30·3	32·85	165	136
6.—THAMES—Cole & C. 156 sq. mi.								
d Chiseldon Vicarage	Mrs. W. L. Waugh	5	1 2	550	..	(30·17)	(161)	(137)
D Wroughton (Swindon W.W.)	J. B. L. Thompson, Esq., C.E.	8	1 2	448	..	29·67	199	149
D Chiseldon (Hodson House)	A. Ashford, Esq.	5	0 9	560	29·0	30·72	189	151
D Swindon (Commonweal Sec. Sch.)	G. Williamson, Esq.	5	1 0	469	..	27·85	184	141
D Swindon (Town Gardens)	J. B. L. Thompson, Esq., C.E.	8	1 4	471	27·5	28·01	186	144
D Purton (Restrop House)	Col. A. Canning	5	1 3	444	27·7	29·29	192	147
d Fairford (Marston Hill)	Maj. R. Hamilton Stubber,	5	0 6	350	..	28·40	..	..

* *Per* Mid-Wessex Rainfall Association.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	DORSETSHIRE. (Area, 988 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—PARRETT. 61 sq. mi.								
D	Evershott (Melbury House)	Mr. W. G. Lee	5	2 0	460	38·7	46·28	199	161
D	Chedington Court	Sir Henry Peto, Bart	8	1 0	605	38·5	42·83	191	156
D	Leigh Vicarage	Rev. T. L. Jenkins	5	0 6	300	36·9	38·31	171	140
D	Sherborne Castle	Mr. Edwin Hill	5	1 0	195	32·5	32·87	190	154
d	Sherborne (Crendle Court)	A. Tyrwhitt Drake, Esq.	5	0 9	380	..	32·58	..	..
D	Sherborne (Barton Gardens)	C. E. Bean, Esq., C.E.	8	1 0	285	..	31·75	196	151
	Sherborne (Castleton)	Reading T. Granthain, Esq.	5	1 0	220	31·8	34·30	..	..
	2.—AXE. 25 sq. mi.								
D	Forde Abbey	G. D. Roper, Esq.	5	0 10	220	37·7	44·26	175	155
	3.—FROME & C. 502 sq. mi.								
D	Portland Bill (Lighthouse) *old g.*	The Meteorological Office	8	1 0	32	25·2	25·60	183	131
D	Portland Bill (Lighthouse) *new g.*	The Meteorological Office	8	1 0	32	..	26·68	182	138
D	Portland (H.M. Naval Depot)	The Works Officer	8	1 0	25	..	33·27	197	152
D	Weymouth (Lansdowne Villa)	Paym.-Capt. T. Seaman, R.N.	5	7 0	100	..	31·87	191	149
D	Weymouth (Westham)	G. Nicolson, Esq.	5	1 0	20	28·0	30·72	178	145
D	Weymouth (Springfield)	Major J. H. C. Devenish	5	1 3	96	27·9	30·87	199	143
D	Radipole (Abbotts Court)	C. E. M. Pinney, Esq.	5	0 9	58	..	34·63	192	150
D	Swanage	W. Wright, Esq.	5	1 0	40	..	28·57	180	137
d	Swanage (Grammar School)	E. G. Malcolm, Esq.	5	1 0	90	..	(29·56)	..	..
D	Chickerell (Montevideo)	Mrs. N. M. Richardson, O.B.E.	5	1 0	100	28·9	31·86	232	158
D	Tyneham House	Mrs. W. H. Bond	8	1 0	255	32·8	35·00	186	148
D	Steeple (Manor House)	Major F. H. Swann	5	1 0	231	34·8	35·88	192	158
D	Creech Grange	J. W. G. Bond, Esq., C.B.	5	1 0	241	37·1	36·50	181	149
D	Langton Herring (The Manor)	E. A. Sparks, Esq.	5	1 0	160	..	32·80	196	150
D	Rodden (Rodden House)	A. H. White, Esq.	5	1 0	85	29·8	31·59	188	144
D	Winfrith Rectory	Rev. C. S. Pugh	5	4 0	200	..	39·70	192	151
D	Abbotsbury (West Street)	J. C. P. White, Esq.	5	1 6	147	29·2	36·53	184	152
D	Upwey (Friar Waddon)	R. Davison, Esq.	5	1 0	215	..	35·59	186	152
D	Upwey (Higher Well)	R. Davison, Esq.	8	1 0	289	..	35·29	191	152
D	Wareham (East Holme)	Miss L. S. Bond	5	1 0	23	33·9	36·12	185	145
D	Wareham (The King's Barrow)	Major R. Fielden	5	1 4	15	31·8	35·25	193	146
D	Wareham (Binnegar Hall)	Mr. J. W. Hayward	5	1 0	65	33·8	35·39	189	143
D	Wareham (Stockford)	W. Bond, Esq.	8	0 11	65	33·4	36·74	202	149
D	Wareham (Trigon)	Mrs. L. Sturdy	8	1 4	60	32·1	35·47	177	145
D	Broadmayne (Charlmont House)	W. R. G. Bond, Esq.	5	1 0	200	..	40·27	227	167
D	Dorchester (Lewell Lodge)	E. R. Sykes, Esq.	5	1 0	200	..	37·13	190	148
D	Dorchester (Rew Manor)	Mrs. J. W. Saunders	8	1 6	300	..	37·97	189	149
D	Dorchester (Kingscote)	E. A. Ffooks, Esq.	5	1 0	226	34·5	42·07	197	164
D	Dorchester Waterworks	H. D. Strange, Esq.	8	1 0	314	36·6	38·80	194	144
D	Dorchester (Wollaston House)	Capt. J. E. Acland	5	1 0	200	37·0	41·66	189	145
D	Dorchester (Stinsford)	J. Wyndham Hull, Esq.	5	0 10	107	37·4	41·44	192	154
	Dorchester (Birkin House)	Col. W. H. F. Weber, C.M.G., D.S.O.	5	1 0	230	37·4	41·97	203	154
D	Puddletown (Clyffe Ho.) (A)	Maj. W. Van de Weyer	8	4 4	200	..	40·07	197	152
D	Poole (A)	E. J. Goodacre, Esq., C.E.	6	1 6	8	..	29·07	178	136
D	Holton Heath (R.N. Cordite Fac.)	The Superintendent	8	1 0	64	29·9	32·25	182	139
D	Parkstone (Firgrove)	F. R. Wadman, Esq.	5	1 0	175	28·6	28·19	193	145
D	Parkstone (Parkside Road)	H. Blanchard, Esq.	8	1 2	150	..	29·17	177	143
D	Parkstone (St. Osmund's Road)	A. D. Stables, Esq.	5	1 3	60	32·2	31·99	176	149
D	Parkstone (The Laurels)	J. N. Blanchard, Esq.	5	1 2	115	..	28·24	187	140
D	Branksome (Leicester Road)	H. Fayle, Esq.	5	1 0	130	..	30·45	184	143
D	Branksome (Bourne Valley)	P. G. G. Moon, Esq.	8	1 3	84	30·0	28·31	163	128
D	Branksome (Alderney Res.)	P. G. G. Moon, Esq.	8	1 3	213	..	33·73	197	149
D	Broadstone (Sewage Works)	T. Wicks, Esq.	5	1 0	26	29·2	30·90	181	136
D	Lyme Regis (Horn Bridge)	E. T. Stoward, Esq.	5	1 0	83	33·2	37·91	198	154
D	Lyme Regis (Rotherfield)	Rev. E. J. Synge	5	1 0	145	34·3	38·18	216	156
D	Lyme Regis (Overton)	C. Wanklyn, Esq.	5	0 10	400	30·9	36·39	233	163
d	Bridport (Coneygar)	Bridport Waterworks Co.	5	1 0	110	32·9	37·30	184	150
D	Bridport (Symondsbury)	P. G. Fry, Esq.	5	1 0	200	..	37·56	201	156
D	Tolpuddle Parsonage	Rev. Harold R. Long	5	1 2	100	32·9	37·97	209	164
D	Puddletown Vicarage	Rev. Canon A. L. Helps	5	4 6	200	35·8	40·69	195	156
D	Bere Regis (Barrow Hill)	A. E. Lucas, Esq.	5	1 0	120	32·9	33·14	177	136
D	Bere Regis (Bloxworth House)	F. G. A. Lane, Esq.	5	1 2	118	33·7	35·37	190	158
D	Broadstone (Grange Road)	E. Nimmo, Esq.	5	1 0	160	..	32·71	181	142

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	DORSETSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—FROME & C.—(*con.*)								
D	Wynford House	Lt.-Col.LordWynford,D.S.O.	5	1 0	410	43·5	49·51	224	176
D	Netherbury (The Chantry)	Lt.-Col. H. L. Kitson	5	1 0	150	35·2	42·48	202	159
d	Whitchurch (Longthorns)	Col. G. Pleydell-Railston	..	..	350	..	38·81	..	..
D	Milton Abbas (Milton Abbey)	Mr. C. H. Perkins	5	0 10	333	..	44·90	218	179
D	Beaminster (Hamilton Lodge)	Fiennes Trotman, Esq.	5	1 0	210	37·6	45·02	210	160
	4.—STOUR. 388 sq. mi.								
	Kinson (Eglinton)	W. C. Keevil, Esq.	5	1 6	45	33·2	34·93	207	144
D	Wimborne (Corfe Mullen W.W.)	G. V. Sparrow, Esq., C.E.	5	1 0	81	32·9	36·16	182	148
D	Wimborne (Corfe Mullen, For. Hill)	E. Philip Belben, Esq.	8	1 0	300	32·5	37·18	185	159
D	Winterbourne Whitchurch Vic.	Rev. H. H. Tilney Bassett	8	1 0	240	35·8	37·93	183	167
D	Sturminster Marshall (Bailie Ho.)	Rev. J. Cross	5	1 0	85	32·6	35·45	186	149
D	Wimborne (Stapehill)	W. J. Marchant, Esq.	5	1 0	95	..	34·76	199	143
D	Wimborne (Walsford Bridge P.S.)	P. G. G. Moon, Esq.	8	1 3	70	..	34·91	182	143
d	Wimborne (Melbury Lodge)	Rev. W. S. Clarke	5	1 6	150	..	35·30	189	150
D	Wimborne (Codford House)	G. H. Batterbury, Esq., M.D.	5	0 9	69	34·5	34·40	221	152
D	Wimborne (Glen Ashton)	H. H. Haines, Esq.	5	1 0	150	..	34·10	182	144
D	Wimborne (Uplands)	E. Percy Sugden, Esq.	5	0 10	..	..	33·54	186	146
D	Blandford (Field's Oak)	H. S. Woodhouse, Esq.	5	1 0	..	34·4	35·51	194	155
D	Blandford (White Cliff St.)	E. Westcott, Esq.	5	1 0	70	..	37·13	187	157
D	Blandford (King's Road)	D. Blanchard, Esq.	5	1 0	195	..	35·36	196	157
D	Blandford (Bryanston Gardens)	Mr. J. Jaques	5	1 0	185	39·9	41·50	189	165
D	Glanville's Wootton (Manor Ho.)	H. B. Debenham, Esq.	5	0 9	350	35·2	38·08	205	152
D	Holwell (Westrow House)	W. Warry, Esq.	5	1 0	252	34·4	36·63	200	156
D	Wimborne St. Giles (St. Giles Ho.)	The Earl of Shaftesbury, K.P.	5	1 6	165	33·4	36·39	194	146
D	Gussage St. Michael Manor	Mrs. Good	5	1 4	200	33·3	37·66	209	169
D	Iwerne Minster (Preston House)	Major H. W. Aston	5	1 0	220	33·2	37·80	195	159
D	Iwerne Minster Vicarage	Rev. R. A. Bond	5	1 3	234	..	37·04	196	156
D	Fontmell Magna (Glebe Cottage)	Dr. J. Appleyard	5	1 0	300	29·6	33·23	168	136
D	Stalbridge School	W. Lovell, Esq.	5	0 8	268	..	34·70	201	158
	Pentridge (Cobley)	F. B. Eastwood, Esq.	5	1 0	500	..	33·97	..	..
D	Cann	Miss G. A. Macdonell	5	1 0	600	..	32·97	200	157
D	Shaftesbury	G. P. Barter, Esq.	5	1 0	722	32·5	29·91	188	155
d	Bourton	H. H. Genge-Andrews, Esq.*	..	..	..	..	35·80	..	..
	5.—EAST AVON. 12 sq. mi.								
	SOUTH DEVONSHIRE. (Area, 1,707 sq. mi.)								
	1.—PARRETT. 7 sq. mi.								
	2.—TAMAR & C. 395 sq. mi.								
D	Plymouth (Boveysand Lodge)	Rev. J. F. Case	5	1 6	75	34·1	40·19	182	159
D§	Plymouth (Mt. Batten) (+A)	The Meteorological Office	8	1 0	82	..	39·86	208	157
D	Plymouth (The Hoe) (+A)	H. Victor Prigg, Esq., C.E.	8	1 0	117	36·7	43·90	209	170
D	Plymouth (Drake's Reservoir)	F. Howarth, Esq., C.E.	5	1 0	149	37·5	45·02	201	161
D	Plymouth (Freedom Park) (+A)	H. Victor Prigg, Esq., C.E.	8	1 0	208	39·4	47·51	207	176
d	Devonport (Admiralty House)	Adml. Hon. Sir H. Brand, K.C.B.	..	1 0	76	..	(44·55)	(198)	(164)
D	Devonport (Rowdens Res.)	F. Howarth, Esq., C.E.	5	1 0	201	35·1	43·81	208	168
D	Plymouth (Hartley Reservoir)	F. Howarth, Esq., C.E.	5	1 0	321	39·9	49·78	211	179
D	Bickley (Roborough Reservoir)	F. Howarth, Esq., C.E.	5	1 0	548	46·2	57·95	247	188
D	Yelverton (Oakfield)	H. Edgcumbe, Esq.	5	1 0	535	51·8	65·80	262	197
D	Sheepstor (Redstone)	F. Howarth, Esq., C.E.	5	1 0	760	59·0	75·04	246	210
D	Sheepstor (Burrator)	F. Howarth, Esq., C.E.	5	1 0	755	59·1	72·48	246	209
D	Sheepstor (Head Weir)	F. Howarth, Esq., C.E.	5	1 0	720	57·0	71·11	246	210
D	Dousland Reservoir	F. Howarth, Esq., C.E.	5	1 0	721	51·8	69·26	254	193
M	Dartmoor (Deancombe Farm)	F. Howarth, Esq., C.E.	5	1 0	807	62·8	79·34	..	..
D	Dartmoor (Lowery)	F. Howarth, Esq., C.E.	5	1 0	899	..	69·95	246	204
M	Dartmoor (Leather Tor Farm)	F. Howarth, Esq., C.E.	5	1 0	910	59·0	61·53	..	..
M	Dartmoor (Siward's Cross)	F. Howarth, Esq., C.E.	5	1 0	1074	68·1	78·80	..	..
D	Whitchurch (Grenofen)	H. Chichester, Esq.	5	1 2	325	46·1	58·25	253	188

* *Per* Mid-Wessex Rainfall Association. § Exposure not orthodox.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SOUTH DEVONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—TAMAR & C.—(*con.*)								
D Whitchurch (Langstone)	F. J. R. Coleridge, Esq.	5	1 0	700	51·4	68·39	234	197
D Whitchurch (Holwell)	F. C. Radcliffe, Esq.	5	1 2	500	..	61·03	245	198
D Tavistock	W. J. Monk, Esq.	5	1 0	457	47·6	60·37	250	190
D Horrabridge (Furzetor)	Col. M. C. Collier	8	0 11	550	..	66·67	254	196
D Tavistock (The Library)	The Librarian	8	1 8	282	44·8	53·24	197	177
M Dartmoor (Double Waters)	F. Howarth, Esq., C.E.	5	1 0	1165	64·2	78·00	..	..
M Dartmoor (N. Hessary Tor)	F. Howarth, Esq., C.E.	5	1 0	1398	..	71·85	..	..
D Mary-Tavy (Blackdown)	H. K. G. Rogers, Esq.	5	1 0	846	53·8	69·74	254	213
D Lifton (Kelly House)	Rev. Maitland Kelly	8	1 6	450	43·8	53·78	232	195
D Coryton Manor	R. L. Newman, Esq.	5	1 2	450	43·5	54·38	238	203
D Lew Down (Coombe Trenchard)	H. M. Sperling, Esq.	5	1 0	450	..	52·34	234	184
D Lydford (Naseby)	Col. H. E. Molesworth, C.M.G., D.S.O.	5	1 0	950	..	62·20	241	203
D Launceston (Polapit Tamar)	late R. C. Coode, Esq.	5	1 0	315	39·3	46·58	229	172
D Ashwater Rectory	Rev. G. D. Melhuish	5	1 0	500	43·0	46·87	214	170
d Holsworthy (Bodmeyric)	W. J. Rogers, Esq.	5	0 11	450	..	49·05	..	192
3.—ERM & C. 217 sq. mi.								
D Salcombe (Blackstone Lodge)	W. J. Shaw, Esq.	5	1 6	280	34·8	42·78	222	170
D Salcombe	The Borough Surveyor.	5	1 0	39	..	41·04	180	152
D Salcombe (Fairhaven)	C. Shillitoe, Esq.	5	1 0	150	..	41·05	210	162
Kingsbridge Reservoir	The Surveyor	8	1 10	100	..	50·83	..	..
D Stoke Fleming (The Glen)	Miss E. L. Garrett	5	1 0	300	..	47·09	211	167
d Stoke Fleming (Stoke Lodge)	Mrs. Parry Okeden	5	0 11	350	..	(46·32)	..	..
D Yealmpton (Torr)	Miss M. Wimbush	5	0 11	100	35·5	48·38	239	173
D Ermington (Strode)	Capt. H. Gore Hawker	5	1 0	75	41·4	50·63	239	173
D Ivybridge (Filham House)	H. Alger, Esq.	5	1 0	160	46·0	55·85	223	180
D Wrangaton (Plymouth M. Hos.)	H. Victor Prigg, Esq., C.E.	5	1 0	607	..	57·11	208	184
D South Brent (Beechfield)	Miss Kingwell	5	1 0	500	61·0	71·80	222	180
D South Brent (Badworthy)	Miss D. B. Latham	5	1 2	550	64·4	85·20	216	189
Cornwood (Yealm Head No. 5)	W. H. Thompson, Esq., C.E.	5	1 0	540	..	73·38	..	199
Cornwood (Yealm Head No. 1)	W. H. Thompson, Esq., C.E.	5	1 0	943	..	81·24	..	..
†Cornwood (Yealm Head No. 2)	W. H. Thompson, Esq., C.E.	5	1 0	1305	..	75·09	..	..
Cornwood (Yealm Head No. 4)	W. H. Thompson, Esq., C.E.	5	1 0	1415	..	74·85	..	..
†Cornwood (Yealm Head No. 3)	W. H. Thompson, Esq., C.E.	5	1 0	1416	..	77·98	..	..
4.—DART. 197 sq. mi.								
D Dartmouth (Ridge Hill)	Dr. H. J. Campbell	5	1 0	120	40·3	50·11	219	170
d Dartmouth (Naval College)	The Curator, Science Lab.	8	1 0	220	..	48·27	..	..
D Churston Ferrers (Greenway)	Mrs. C. Williams	5	0 9	..	40·8	49·91	188	158
d Lower Washbourne	Messrs. Brotex, Ltd.	8	1 0	200	..	(53·17)	(189)	(158)
D Brixham (Combe Bank)	H. Clayton, Esq.	5	6 6	115	36·7	41·55	216	153
d Waddeton Court	Sir A. L. Goodson, Bart.	5	1 0	175	40·5	47·80	..	161
D Stoke Gabriel (Maisonnette)	Edward Stobart, Esq.	5	1 0	100	42·8	54·43	215	183
d Totnes (Dundridge Gardens)	Mr. C. H. Cole	5	1 0	250	48·3	59·80	..	..
D Paignton Vicarage	Rev. Preb. H. M. Drake	5	1 0	42	35·4	42·88	203	150
D Paignton (Victoria Park)	The Town Clerk	8	1 1	12	..	41·09	204	147
D Paignton (Claylands)	G. M. Rosling, Esq.	8	1 2	150	35·7	42·72	205	146
D Totnes (Walrond House)	H. Hurman, Esq.	5	1 2	40	41·8	56·37	196	157
D Totnes (Staverton)	J. A. Devenish, Esq.	5	0 11	50	..	49·91	191	165
D Dean Prior Vicarage	Rev. H. H. Breton, M.A.	8	1 0	331	..	78·34	225	198
D Ipplepen Vicarage	Rev. R. D. Cooke	5	1 0	266	36·8	47·81	184	163
D Holne (Church Park Cottage)	L. W. Frost, Esq.	5	1 6	620	59·8	78·26	231	174
D Ashburton (Hele House)	E. M. Dowson, Esq.	5	1 0	350	49·6	61·89	222	181
d Ashburton (Druid House)	Miss R. M. Windeatt	5	1 0	583	51·8	57·87	..	..
D Dartmoor (Fox Tor)	E. Rowlands, Esq., C.E.	8	0 7	1160	..	78·50	221	203
D Dartmoor (Strane Valley)	E. Rowlands, Esq., C.E.	8	0 7	1120	..	68·73	220	198
D Dartmoor (Swincombe)	E. Rowlands, Esq., C.E.	8	0 7	1120	..	83·76	219	201
D Princetown (Huccaby House)	Lt.-Col. H. H. Joll, D.S.O.	5	1 0	900	54·6	69·87	226	191
D Princetown (Wydemeet)	Colin M. E. May, Esq.	5	1 0	900	58·2	81·09	245	212
D Princetown (H.M. Prison) (+A)	The Governor	5	1 0	1359	81·9	97·37	259	219
w Dartmoor (Cowsic Valley)	F. Howarth, Esq., C.E.	8	1 6	1352	..	79·95	..	..

† Gauge over-exposed on moor.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SOUTH DEVONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—DART—(*con.*)								
†M Dartmoor (Black Dunghill) No. 5	F. Howarth, Esq., C.E.	8	1 0	1590	..	57·40	..	..
†M Dartmoor (Beardown Tor) No. 3	F. Howarth, Esq., C.E.	8	1 0	1550	..	64·10	..	..
†M Dartmoor (White Tor) No. 1	F. Howarth, Esq., C.E.	8	1 0	1640	..	58·70	..	..
D Postbridge (Archerton)	Miss E. M. Bennett	5	1 0	1320	..	91·52	235	217
†M Dartmoor (Devil's Tor) No. 2	F. Howarth, Esq., C.E.	8	1 0	1785	..	57·40	..	..
†M Dartmoor (Cowsic Head) No. 4	F. Howarth, Esq., C.E.	8	1 0	1580	..	75·40	..	..
D Postbridge (Warren House Inn)	S. C. Chapman, Esq., C.E.	5	1 0	1400	..	79·40	245	211
5.—TEIGN. 209 sq. mi.								
D Torquay (Cary Green)	The Town Clerk	5	1 0	12	33·0	37·84	191	133
D Torquay (Middle Lincombe Rd.)	Miss L. M. Brown	5	1 0	250	30·9	35·72	208	153
D Torquay (Abbey Park)	The Town Clerk	5	1 0	27	..	38·83	192	141
D Torquay (Abbey Road)	Henry Brown, Esq	5	1 0	125	34·3	42·18	190	149
D Bickington (Higher Goodstone)	Lt.-Com. W. A. A. Bolitho, R.N.	6	1 0	400	..	48·24	214	171
D Highweek	H. B. Mapleton, Esq., M.D.	5	1 0	200	..	42·98	208	157
D Newton Abbot (Seale Hayne Coll.)	The Principal	5	1 0	375	34·7	44·17	201	160
Teignmouth (Bonnicliff)	The Misses Horner	5	1 0	260	32·8	40·26	192	..
D Teignmouth (Woodlands)	S. B. Harris, Esq.	8	1 2	98	31·5	36·75	184	141
D Teignmouth (Fontigary)	John F. Caley, Esq.	5	1 0	260	30·1	38·08	203	151
D Teignmouth (Landscore Road)	Dr. E. E. Moore	5	1 0	143	31·8	38·46	205	150
D Teignmouth (Den Gardens)	G. F. Rossiter, Esq	8	1 0	20	31·8	39·32	203	142
D Teignmouth (Hazledown Res.)	G. F. Rossiter, Esq.	8	1 0	425	32·4	41·72	204	160
D Teignmouth (Shaldon Res.)	G. F. Rossiter, Esq.	5	1 0	213	34·9	43·89	188	155
D Teignmouth (Landscore Res.)	G. F. Rossiter, Esq.	8	1 0	133	33·2	40·79	205	155
D Teignmouth (The Shrubbery)	E. A. Norton, Esq.	8	1 0	275	32·9	36·38	223	157
D Ilsington	Miss E. Willcocks	5	1 0	650	47·8	59·33	231	173
D Dawlish (The Lawn)	S. F. C. Churchward, Esq.	5	1 0	18	32·3	35·70	193	149
D Dawlish (Luscombe Castle)	Peter Hoare, Esq.	8	1 2	175	35·9	47·23	246	161
D Bovey Tracey (Hedgebarton)	S. C. Chapman, Esq., C.E.	5	1 6	1137	59·2	73·18	228	183
D Bovey Tracey (Edymead)	Rev. W. V. Vickers	5	1 9	200	..	47·06	194	158
W Ashcombe (Thorns Reservoir)	S. F. C. Churchward, Esq.	5	1 0	550	36·4	46·28	..	..
d Hennock (Hazlewood)	R. P. Kitson, Esq.	5	1 0	650	..	43·97	..	..
D Moretonhampstead (Bullaton)	S. C. Chapman, Esq., C.E.	8	1 0	928	42·2	50·91	239	173
D Moretonhampstead (Mardon)	S. C. Chapman, Esq., C.E.	8	1 0	837	40·6	45·18	239	171
D North Bovey (Manor House)	Mr. J. T. Laurence	5	1 0	700	49·0	61·29	231	198
M Chagford (Toms Hill)	S. C. Chapman, Esq., C.E.	5	1 6	1500	..	90·22	..	..
M Chagford (Whiteridge)	S. C. Chapman, Esq., C.E.	5	1 6	1650	..	86·80	..	..
M Chagford (Hempson)	S. C. Chapman, Esq., C.E.	5	1 6	1350	..	86·94	..	..
D Christow (Kennick) No. 1	S. C. Chapman, Esq., C.E.	8	1 0	836	41·6	54·10	233	172
D Christow (Kennick) No. 2	S. C. Chapman, Esq., C.E.	8	1 0	860	..	52·88	232	171
D Chagford (Fernworthy)	S. C. Chapman, Esq., C.E.	5	1 0	1150	..	83·69	246	216
D Chagford (Metherall)	S. C. Chapman, Esq., C.E.	8	1 0	1150	..	80·35	246	210
M Chagford (Thornworthy Down)	S. C. Chapman, Esq., C.E.	5	1 6	1250	..	80·85	..	..
D Christow (Smithacott)	S. C. Chapman, Esq., C.E.	8	1 0	861	41·4	40·88?	229	161
D Moretonhampstead (Stinhall)	S. C. Chapman, Esq., C.E.	5	1 6	844	48·9	63·27	208	196
M Moretonhampstead (Blckngstne)	S. C. Chapman, Esq., C.E.	5	1 0	1158	42·5	49·01	..	..
D Christow (Laployd)	S. C. Chapman, Esq., C.E.	5	1 6	1041	41·6	56·03	229	176
D Chagford (Thornworthy)	Miss W. H. Varwell	5	1 0	1150	59·6	79·16	239	195
D Chagford (Dartmoor Sanatorium)	T. J. Smith, Esq.	5	1 6	750	50·3	63·38	203	174
D Chagford (Huish)	Col. P. Hart Dyke, D.S.O.	5	1 0	595	..	60·68	240	190
6.—EXE. 445 sq. mi.								
Exmouth (Colerstraive)	J. Barber, Esq.*	5	0 0	100	..	35·29	200	..
D Exmouth (Douglas Avenue)	Mrs. S. G. Gillum	5	0 10	80	28·7	33·74	192	141
D Exmouth (Waterworks Road)	S. Hutton, Esq., C.E.	5	1 0	195	28·6	31·74	176	130
D Exmouth (Filters, Salterton Rd.)	S. Hutton, Esq., C.E.	8	8 6	195	31·5	35·87	204	142
D Exmouth (Filters, Capel Lane)	S. Hutton, Esq., C.E.	5	8 6	240	30·3	35·61	199	139
D Starcross	H. Falkner, Esq.	5	1 0	12	32·1	36·64	195	135
D Lympstone (Manor House)	Gilbert Shelden, Esq.	5	0 11	54	30·8	38·70	193	145
d Lympstone (Mussel Purifn. Stn.)	The Director	8	1 5	4	29·6	33·87	..	..

* *Per* Devon & Exeter Gazette.

† Gauge over-exposed on moor.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SOUTH DEVONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	6.—EXE—(*con.*)								
D	Woodbury (Oakhayes)	E. S. Chattock, Esq.	5	1 0	200	..	38·27	205	154
D	Woodbury (Little Orchard)	Miss J. Waters	5	1 0	200	..	38·18	195	141
M	Topsham (Ebford)	Lt.-Col. B. W. Bogle	5	1 0	45	30·5	35·15	..	..
d	Topsham (Altamira)	Mrs. Wimbush	5	0 9	120	29·3	31·95	..	..
D	Exminster (Trood House)	Lt.-Col. T. L. Ormiston	5	1 0	75	..	38·62	213	146
D	Exeter (Hatfield, Longdown)	C. Holman, Esq.	5	0 10	450	33·8	42·99	193	151
d	Aylesbeare (Rosamondford)	A. T. Loram, Esq.	5	0 9	220	31·4	37·80	..	144
D	Exeter (Devon and Exeter Inst.)	J. E. Coombes, Esq.	5	13 7	155	30·5	38·48	214	161
D	Exeter (The Close)	The Ven. Arch. T. N. Leeke.	5	1 2	120	..	39·88	211	161
	Exeter (The Close)	Rev. Canon D. McLaren	5	0 9	100	..	38·79	202	161
D	Exeter (Hele's School)	W. P. Baron, Esq.	8	6 0	133	30·7	38·51	208	158
D	Tedburn St. Mary Rectory	Rev. H. Rushbridger	5	0 10	400	32·7	42·41	255	178
d	Spreyton (Fuidge Manor)	Mrs. Elliott	5	1 6	710	35·7	41·42	..	149
D	Rockbeare Manor	Lt.-Col. H. Spencer Follett	5	0 10	180	30·9	34·32	182	150
D	Poltimore Rectory	Rev. Dr. Hopkinson	5	1 0	80	..	37·32	234	163
d	Brampford Speke	S. Stevens, Esq.	5	1 0	170	..	35·11	..	145
D	Crediton (Ship Hotel)	R. Stanley Clarke, Esq.	8	1 2	200	33·1	41·91	236	169
	Crediton (Haywards School)	The Headmaster	..	..	..	..	40·76	..	..
d	Silverton (Killerton)	Rt. Hon. Sir F. Dyke Acland, Bt.	5	1 0	159	30·6	36·21	204	155
D	Silverton	G. B. Savery, Esq.	5	1 0	260	..	41·15	227	168
D	Crediton (Okefield)	Seymour F. Pope, Esq.	5	1 0	325	32·2	39·55	243	170
D	Copplestone (Copplestone House)	Miss M. Pope	5	0 11	315	34·1	42·55	241	170
D	Bradninch (Dunmore House)	Miss H. R. Hepburn	5	1 0	300	33·8	40·45	208	161
D	Cullompton	Murray T. Foster, Esq.	5	1 0	202	35·3	42·52	227	173
D	Kentisbeare	A. E. Painter, Esq.	5	1 0	304	..	40·84	207	159
D	Tiverton (St. Aubyn's Park)	F. C. Fox Strangways, Esq.	5	1 0	394	39·4	45·53	232	175
D	Tiverton (Hartnolls)	Maj-Gen. F. A. Bowles, C.B.	5	1 4	226	37·9	45·99	225	168
D	Tiverton (Blundell's School)	E. G. Peirce, Esq.	5	1 6	270	..	43·98	223	166
D	Tiverton (Lythecourt)	A. L. Sadler, Esq.	5	1 2	220	40·2	46·85	203	167
d	Hemyock (Windlehurst)	Sir Arthur Tedder, C.B.	5	1 0	750	37·4	48·87	..	..
d	Hemyock Place	N. J. Hitchings, Esq.	6	3 0	850	..	43·45	..	..
D	Bampton (Stuckeridge)	Brig-Gen. J. C. Livingstone-Learmonth, C.M.G.	5	1 3	750	..	47·08	208	163
d	Bampton (Castle Grove)	Major B. M. Read	5	1 4	272	..	50·74	..	..
D	Morebath Manor	C. H. W. Malet, Esq.	5	1 0	600	..	52·54	240	201
	7.—AXE & C. 237 sq. mi.								
D	Budleigh Salterton (West Ways)	J. Hartree, Esq.	5	1 0	140	..	34·74	160	134
D	Budleigh Salterton (Bragwick)	E. Fisher, Esq.	5	1 6	40	..	33·89	176	142
D	Budleigh Salterton (Tidwell Ho.)	Mrs. J. H. Foster	5	1 0	100	..	35·48	180	149
D	Budleigh Salterton (Knowle Ho.)	Mrs. Pepys	5	2 4	230	..	37·50	169	155
	Budleigh Salterton (Squabmoor)	S. Hutton, Esq., C.E.	5	1 0	267	31·9	38·72	..	..
	East Budleigh (Bicton Common)	S. Hutton, Esq., C.E.	5	1 0	300	32·2	38·59	..	..
D	East Budleigh (Bicton Gardens)	Mr. E. H. High	5	1 0	90	31·4	38·02	194	152
D	Salcombe Regis (Steephill)	Burleigh D. Kilburn, Esq.	5	1 0	150	..	36·07	204	148
D	Sidmouth (U.D.C.)	L. M. Blanchard, Esq.	5	1 0	25	..	33·68	186	137
D	Sidmouth (Home Orchard)	S. Horsley, Esq.,	5	1 0	100	..	38·01	184	139
d	Sidmouth (Winslade Cottage)	Miss G. Collins, M.B.E.	5	1 0	145	..	37·13	..	..
D	Sidmouth (Sidmount)	Miss C. M. Radford	5	1 0	149	32·4	37·84	200	157
D	Sidmouth (Sidmount)	Miss C. M. Radford	5	1 0	186	32·5	37·39	201	154
D	Seaton (The Copse)	H. J. Roberts, Esq.	5	1 0	220	34·8	37·60	217	165
D	Seaton (Withylake)	T. F. Tracy, Esq.	5	1 0	200	..	37·24	194	151
D	Sidmouth (Harpford)	P. M. Miller, Esq.	5	1 6	195	..	40·38	163	148
D	Lyme Regis (Pinhay)	Mr. W. F. Shillabeer	5	1 11	465	34·9	37·69	202	153
D	Lyme Regis (Ware)	Capt. R. A. D. Fullerton	5	0 10	318	33·9	38·37	197	161
D	Ottery St.Mary (Broad Oak)	Miss Tallant	5	1 2	350	..	41·31	214	160
	Ottery St. Mary (Easthayes)	T. A. B. Pares, Esq.	8	1 0	550	..	43·42	182	146
D	Ottery St. Mary (West Hill)	B. Stansbury, Esq.	5	1 6	340	34·2	41·71	223	166
D	Ottery St. Mary (Broad Street)	H. D. Badcock, Esq.	5	1 0	170	36·3	41·98	220	161
	Kilmington (Haddon Corner)	late A. Hitchcock, Esq.	5	1 0	410	37·8	45·99	215	162
M	Kilmington (Summerleaze)	late A. Hitchcock, Esq.	5	1 0	82	36·0	42·64	..	..
D	Axminster (Lea Combe House)	Major A. C. F. Luttrell	5	1 0	170	38·4	44·14	176	156
D	Honiton (Beech Grove)	Major A. T. Baker	5	0 10	340	38·5	45·81	214	148

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SOUTH DEVONSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—AXE—(*con.*)								
D	Axminster (Coaxdon Hall)	Dr. Cecil Woodhouse	5	1 0	165	37·5	40·97	189	147
D	Membury (Yarty House)	Major W. H. Wilkin	5	1 0	245	..	40·64	198	148
	Honiton (Allington)	A. A. Sanders, Esq.	5	0 6	200	..	43·24	..	..
D	Membury (Green Down)	James Lee, Esq.	5	1 0	500	38·4	48·36	203	157
D	Stockland (Post Office)	James Clarke, Esq.	5	1 6	350	40·5	49·37	179	154
	NORTH DEVONSHIRE. (Area, 898 sq. mi.)								
	1.—NORTH COAST STREAMS. 77 sq. mi.								
D	Croyde (Baggy Point)	Miss C. M. Hyde	5	1 0	35	..	(35·38)	209	167
D	Woolacombe (Hotel Grounds)	Miss Chichester	5	1 0	59	..	36·44	183	163
D	Ilfracombe (Reservoir)	F. B. Goodman, Esq., C.E.	5	1 0	395	46·2	54·97	252	198
D	Ilfracombe (Langleigh)	H. B. Holland, Esq.	5	1 0	127	41·8	48·78	235	188
D	Ilfracombe (Bowling Green)	F. B. Goodman, Esq., C.E.	5	1 0	25	..	45·49	224	159
	2.—TAW. 442 sq. mi.								
D	Okehampton (South Zeal)	Capt. S. T. Dean-Pitt	5	1 0	750	45·5	57·57	221	182
D	Witheridge	Rev. J. A. S. Castlehow	5	1 0	600	39·5	47·14	252	189
D	High Bickington Rectory	Rev. C. V. Wansbrough	5	0 8	587	..	38·47	227	166
	Chittlehamholt	Rev. H. Carter	5	1 0	430	..	42·14	209	..
d	East Anstey Rectory	Rev. J. S. Payne	5	0 9	750	..	52·14	..	(184)
D	East Anstey (Rhyll Manor)	Mrs. E. L. Hancock	5	1 6	850	..	48·47?	210	187
D	Filleigh (Castle Hill Gardens)	The Countess Fortescue	5	1 0	317	43·1	52·11	235	190
	Tawstock Court	Sir Basil Peto, Bart.	8	1 0	150	..	39·78	..	..
D	Molland (Green Cot)	S. J. Case, Esq.	5	1 0	674	50·5	59·77	243	198
D	Barnstaple (N. Dev. Athenæum)	Miss E. Young	8	1 0	25	36·6	43·11	247	177
D	Barnstaple (Hele Manor Park)	M. B. B. Heath, Esq.	6	1 0	130	..	43·47	222	179
D	Barnstaple (Fort Hill)	Miss E. F. Sterry	5	1 0	197	38·3	47·10	248	191
D	High Bray Rectory	Rev. C. F. Ford	5	1 1	700	..	61·61	233	192
D	Barnstaple (Westaway)	Major O. L. Trechmann	5	1 0	140	39·1	46·99	226	180
	Goodleigh (Willesleigh House)	Lt.-Col. Montague H. Hall	5	1 0	375	40·0	47·22	218	187
D	Goodleigh (Gunn Cottage)	Major H. Sandford Claye	5	1 0	720	43·4	51·67	238	194
D	Braunton	A. J. Besley, Esq.	5	1 0	145	33·5	39·94	211	171
D	Arlington Court	Miss Chichester	5	1 0	613	53·8	62·39	225	200
D	Challacombe	F. B. Goodman, Esq., C.E.	5	1 0	815	62·2	76·16	243	206
D	Georgeham (Spreacombe Manor)	A. Leigh Barker, Esq.	5	0 9	340	38·1	45·72	233	180
	3.—TORRIDGE. 342 sq. mi.								
D	Okehampton (Uplands)	E. P. Burd, Esq.	5	1 0	700	51·4	60·03	243	192
d	Okehampton Grammar School	W. Hunter Esq.	5	1 0	500	..	57·18	..	181
d	Monkokehampton	Rev. R. Y. Holmes	5	0 6	245	..	38·97	..	..
	Dolton (Hilliers)	A. Smythies, Esq.	5	1 3	380	37·9	41·06	..	..
D	Torrington (Enfield)	G. M. Doe, Esq.	5	1 0	337	39·3	41·48	227	174
D	Parkham (Melbury Moor)	F. Harding, Esq.	5	1 0	630	50·2	54·51	231	186
D	Parkham (Melbury Reservoir)	F. Harding, Esq.	5	1 0	517	52·8	62·57	231	198
D	Buckland Brewer (The Cottage)	Miss B. G. Rogers	5	0 11	469	45·0	48·57	240	186
D	Littleham (Orleigh Court)	W. H. Rogers, Esq.	5	1 0	260	48·0	50·37	218	179
D	Landcross (South Close)	C. R. C. Hibbert, Esq.	5	1 0	100	35·6	44·91	227	175
D	Bideford (Jennett's Res.)	Borough Surveyor	5	1 0	62	..	42·97	218	200
D	Bideford (Gammaton Res.)	Borough Surveyor	5	1 0	350	..	43·35	209	184
D	Bideford (Webbery)	Mrs. C. E. Boyd	5	1 0	355	37·7	42·53	217	180
D	Bideford (Edgehill College)	Miss A. G. Cross	5	1 0	100	..	37·79?	229	161
D	Westleigh House	Rev. H. G. de C. Stevens Guille	5	1 0	187	35·6	39·29	242	174
D	Northam (Cluden)	P. Varwell, Esq.	5	0 9	215	35·9	38·76	235	168
D	Westward Ho ! (Royal Golf Club)	Major A. Newton-King	5	1 6	10	32·3	37·19	199	176
	4.—WEST COAST STREAMS. 32 sq. mi.								
D	Hartland (Fosfelle)	R. P. Chope, Esq.	5	1 0	480	..	52·40	242	191
D	Clovelly Court	Mr. S. M. Wilson	5	0 11	360	51·2	47·98	227	197
	5.—EXE. 5 sq. mi.								

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CORNWALL. (Area, 1,363 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—CAMEL & N.W. COAST STREAMS. 458 sq. mi.								
Crowan (Boswyn Res.)	Camborne Water Co.*	..	..	511	*43·1*	58·89	229	189
D Lelant	Mrs. Tyringham	5	1 3	50	*42·0*	53·23	209	184
D Hayle (Gwythian Road)	Caldwell Harpur, Esq.	5	0 10	98	*39·2*	49·87	238	179
D St. Ives (Halsetown Vicarage)	Rev. T. C. F. Barfett	5	1 0	328	..	55·94	248	193
D St. Ives (Bussow Moor)	T. S. Rogers, Esq.	5	1 1	400	..	54·66	228	180
D St. Ives (Cemetery)	The Borough Surveyor	5	1 1	141	..	58·11	214	176
D Camborne	Miss I. Osborne	5	1 2	402	*43·4*	57·77	212	184
D Camborne (Uplands)	H. G. Rix, Esq.	5	1 0	210	..	49·31	235	176
D St. Ives (Liscoruah)	Col. J. M. Findlay, D.S.O.	5	0 5	300	..	55·76	210	186
D Redruth (Trewirgie)	A. P. Jenkin, Esq.	5	1 0	399	45·3	56·54	241	182
M Redruth (Green Lane Nurseries)	F. Sanders, Esq.	5	1 0	270	*41·2*	52·15	..	..
St. Agnes (Church Town) *new g*	Dr. W. C. Whitworth	5	..	318	..	48·16	226	180
Newquay (Reservoir)	Dr. C. C. Vigurs	5	1 0	210	*33·1*	42·71	..	..
D Newquay (Mount Wise) No. 1	Dr. C. C. Vigurs	5	1 0	190	33·2	39·71	222	160
D Bodmin (Polgwin)	H. D. Foster, Esq.	5	1 0	400	*48·8*	55·93	231	196
D Bodmin (Castle Hill House)	Mrs. Leslie	5	1 0	484	*49·7*	55·30	269	195
D Little Petherick (St. Petroc Minor)	Miss A. T. Skilbeck	5	1 2	150	..	39·94	230	183
Wadebridge (Bryn)	Miss K. D. Phillips	5	1 6	50	*39·7*	45·24	..	..
D Wadebridge (Trewornan)	Brig.-Gen. L. J. Hext, C.M.G.	5	1 0	30	*37·8*	44·18	251	189
D St. Kew (Skisdon)	Mrs. Braddon	5	1 0	100	*42·1*	49·80	248	199
St. Minver (Trebetherick)	A. T. Roseveare, Esq.	8	1 0	70	*33·8*	38·62	..	..
St. Minver (Lundy Bay)	W. Poynter Adams, Esq.	5	1 0	240	..	45·14?	..	..
Camelford (Roughtor)	A. W. Patten, Esq.*	..	..	940	..	73·06	246	206
D Camelford (Stannon Clay Wks.)	English China Clays, Ltd.	8	2 0	800	*57·2*	64·23	238	216
D Bude (School House)	Karl Durston, Esq.	5	1 0	50	*33·4*	36·51	213	161
D Bude (Golf Club)	The Secretary	5	0 10	70	..	47·78	216	173
D Bude (Trelana)	G. A. C. Thynne, Esq.	..	..	200	..	38·32	198	168
2.—FOWEY & S.E. COAST STREAMS. 620 sq. mi.								
Lizard (Tregullas House)	A. P. Jenkin, Esq.	..	..	244	..	42·25	..	..
D Ruan Minor	Miss H. F. Shepherd	5	1 0	210	*35·9*	43·51	225	171
Mullion (Council School)	E. J. Perry, Esq.	5	1 1	208	..	43·41	230	162
D Mullion	H. H. Penrose, Esq.	5	0 10	178	*35·2*	43·88	203	170
D Porthcurno	Eastern Telegraph Co.	5	1 0	150	*36·8*	44·26	238	175
St. Keverne (Lanarth)	P. D. Williams, Esq.	5	1 3	310	*43·8*	51·03	242	186
D Bosahan (St. Martin-in-Meneage)	Hon. Mrs. Colborne Vivian	6	1 0	180	..	51·79	209	173
Helston (Tenderah)	J. W. Tyacke, Esq.	5	1 4	220	..	52·81	255	185
Sithney (Council School)	R. Trend, Esq.	5	0 10	296	..	50·11	..	..
Constantine (Pons-a-Verran)	A. Mayne, Esq.*	8	1 0	60	*39·5*	47·16	234	178
D Penzance (Trewidden)	Mr. J. H. Murley	9	1 0	275	*42·9*	48·95	226	181
d St. Michael's Mount	Lord St. Levan	..	..	50	..	41·80	..	..
D Penzance (Morrab Gardens)	C. H. Benn, Esq.	5	1 0	55	40·9	51·30	245	181
D Penzance (Trengwainton House)	Lt.-Col. E. H. W. Bolitho	8	1 2	400	*46·2*	54·96	239	189
D Gulval (Co. Council Plot)	Cornwall County Council	5	1 0	21	*41·5*	50·86	231	186
‖D Falmouth (Pendennis Castle)	Meteorological Office	8	0 9	200	..	42·19	206	168
D Falmouth Observatory (+A)	Roy. Cornwall Poly. Soc.	5	1 0	167	43·6	49·59	205	171
D Falmouth (Trefusis)	Lt.-Col. The Hon. H. W. F. Trefusis	5	1 3	200	*40·5*	41·93	211	164
D Penryn (Ashfield)	J. G. Stephens, Esq.	5	1 0	95	*41·6*	51·18	236	178
Penryn (Roskrow)	Mrs. E. Stephen*	..	..	550	..	57·90	..	..
M Devoran	Lord Clifden*	5	1 0	120	*41·0*	50·75	..	..
D Gwennap (Trevince)	C. H. Beauchamp, Esq.	12	1 0	240	*44·4*	56·71	245	187
D St. Day (Council School)	R. R. Blewett, Esq.	5	0 9	390	*49·1*	51·41	225	173
D Truro (Killiow)	Miss E. F. A. Daubuz	5	1 0	250	*42·0*	49·43	219	169
Tregoney (Trewarthenick)	P. A. Welman, Esq.	6	0 10	200	..	53·26	..	..
D Truro (Tregolls)	Miss C. L. Rashleigh	5	1 0	65	*41·8*	52·44	234	184
D Truro W.W. (Lower Tregurrow)	W. J. Lean, Esq.	5	1 0	71	*43·2*	53·93	206	188
D Mevagissey	C. Metcalfe, Esq.	5	1 0	100	*42·5*	52·65	237	196
D Polperro	Mrs. F. H. Perrycoste	5	1 0	100	*39·2*	47·57	270	186
D Fowey	Town Clerk	5	1 0	51	*34·7*	43·02	204	173
D St. Austell (Charlestown Old Vic.)	C. A. Battiscombe, Esq.	5	4 6	204	*42·7*	55·17	226	193

* *Per* Cornwall Rainfall Association.

‖ Exposure not othodox.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	CORNWALL—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—FOWEY & S.E.—(*con.*)								
D	St. Austell (Trevarna)	W. M. Coode, Esq.	5	1 0	300	45·8	58·45	242	200
D	East Looe	W. D. Clague, Esq.	5	1 0	50	..	48·92	218	174
D	Downderry (The Watch House)	Mrs. Sneyd	5	1 0	100	..	43·90	240	189
D	Looe (Morval)	Capt. A. H. Tremayne, R.N.	5	1 0	150	*46·9*	58·19	223	177
D	Lostwithiel (The Terrace)	R. Pease, Esq.	5	1 0	110	*50·0*	57·05	242	186
D	St. Keyne (Locrenton)	Rear-Admi. R. Wykes-Sneyd	5	0 10	250	..	63·31	250	198
D	Menheniot (Coldrenick)	Rev. F. E. Trelawny	5	1 0	301	*48·4*	60·29	198	181
D	Liskeard (Trevelmond)†	Mrs. Cock	5	1 0	400	*57·4*	69·79	266	216
D	Liskeard (Penmilder)	Miss D. P. Foster	6	1 0	301	*42·6*	56·45	222	189
	Liskeard (Lewarne)	W. Rendall, Esq.*	..	..	420	..	81·72?	249	211
	St. Clear (Tregarric)	Col. J. D. A. Roberts	5	1 6	800	*52·1*	63·60	..	..
D	Bolventor Vicarage	Rev. A. S. Rashleigh	5	1 0	845	*71·1*	80·88	262	220
	3.—TAMAR & C. 279 sq. mi.								
D	Devonport (Empacombe)	Miss M. C. Algate	5	2 0	15	36·8	47·64	208	172
D	Devonport (Cremyll)	S. B. Wilcox, Esq.	5	1 4	25	*36·9*	38·38	227	172
D	Torpoint (Trethill House)	Col. J. D. A. Roberts	5	1 6	200	*34·3*	43·43	219	161
	Torpoint (Wilcove)	G. P. Jenkin, Esq.*	..	..	40	..	49·21	..	..
D	St. Mellion (Pentillie Castle)	W. T. Johnson, Esq.	5	1 0	150	*50·7*	56·82	222	171
D	Stoke Climsland School	T. Oates, Esq.	5	5 0	458	..	50·50	211	148
D	Launceston (Landue)	Miss S. E. Tregoning	5	0 11	225	*44·2*	49·80	254	189
D	Launceston (Hexworthy)	R. B. Rogers, Esq.	5	1 0	270	*43·8*	48·22	240	169
D	Launceston (Pendruccombe)	Miss L. C. Seccombe	5	1 0	469	*42·2*	52·08	230	176
	Egloskerry (Tregeare)	E. G. B. Lethbridge, Esq.	5	1 10	575	*47·3*	54·10	..	..
D	North Tamerton (Davies)	W. S. Bray, Esq.	5	1 0	390	*36·8*	43·97	224	185
	4.—INSULAR.—Isles of Scilly. 6 sq. mi.								
D	St. Mary's	The Meteorological Office	8	1 0	165	31·9	38·56	238	161
D	Tresco Abbey (*old g*)	Maj. A. A. Dorrien Smith, D.S.O.	8	2 4	40	32·6	39·48	235	168
D	Tresco Abbey (*new g*)	Maj. A. A. Dorrien Smith, D.S.O.	5	1 0	40	33·4	40·05	234	168
	SOMERSETSHIRE. (Area, 1630 sq. mi.)								
	1.—LOWER AVON. 300 sq. mi.								
d	Wanstrow (The Manor Cottage)	P. E. B. Warburton, Esq.	5	1 0	465	37·7	39·45	..	..
D	Shepton Mallet (Pondsmead)	R. A. Hobhouse, Esq.	8	1 0	710	44·9	48·29	228	185
D	Frome W. W. (Egford)	L. Slaughter, Esq.	8	2 0	270	35·8	37·10	208	158
D	Frome (Fromefield)	H. G. Chislett, Esq.	5	1 0	259	..	(36·38)	(207)	(157)
D	Frome (Selwood School)	Miss A. K. Coombs	5	1 7	320	33·9	33·93	218	157
D	Mells (Selwood)	Miss E. G. Horner	5	1 0	344	37·2	37·01	229	157
D	Binegar (Gurneyslade)	Rev. G. B. Hicks	5	1 0	588	43·3	48·44	206	173
D	Stratton-on-Fosse (Downside Ab.)	Rev. G. B. Hicks	8	1 0	600	41·5	43·94	218	169
D	Orchardleigh Park	Major A. C. Duckworth	8	1 0	320	32·8	35·92	192	149
D	Chilcompton (The Woodlands)	C. H. M. Thring, Esq.	5	0 10	450	..	45·66	234	168
d	Chewton Mendip (The Priory)	The Earl Waldegrave	5	1 0	550	45·0	45·96	217	(169)
D	Midsomer Norton (Dymboro')	Dr. A. Bulleid	5	1 0	350	35·8	39·63	201	159
D	Midsomer Norton (C.E. School)	J. Poyner, Esq.	5	0 8	310	..	39·55	210	164
D	Radstock (Frome Hill)	C. H. Perry, Esq.	8	2 6	330	34·7	38·20	187	149
D	Litton (Sherborne Res.)	J. A. McPherson, Esq., C.E.	5	1 0	340	40·0	45·02	199	161
w	Harptree Hill	J. A. McPherson, Esq., C.E.	8	1 0	784	..	47·29	..	..
D	Tellisford (Crabb Hall)	Dr. W. C. Everley Taylor	5	0 9	182	..	30·20	180	137
D	Hinton Blewitt Manor	Maurice Church, Esq.	5	1 3	500	39·6	44·63	241	164
d	High Littleton Vicarage	Rev. T. H. Fitzpatrick	5	0 11	446	34·7	36·25	..	..
D	Clutton (Council School)	I. C. Hoyal, Esq.	5	1 0	427	..	40·09	222	150
D	Pensford (Sutton Court)	Lord Strachie	8	1 0	280	37·7	40·23	223	165
D	Midford (Pumping Station)	Combe Down W.W. Co., Ltd.	5	1 0	135	..	33·23	194	154
d	Monkton Combe (Crossways)	M. J. Lipscomb, Esq.	5	1 0	210	33·2	35·65	..	..
D	Pensford (Hunstrete House)	H. Leyborne Popham, Esq.	5	0 9	400	33·7	35·93	204	157
d	Bath (Combe Down)	Mrs. Vaisey	5	1 0	660	..	(34·00)	(182)	(154)
D	Chew Magna	J. A. McPherson, Esq., C.E.	5	1 0	180	36·3	38·74	190	158
D	Pensford (Publow School Ho.)	A. Hayes, Esq.	5	1 0	230	33·2	37·60	195	154

* *Per* Cornwall Rainfall Association. † Moved from St. Pinnock Rectory, June, 1930.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
				in.	*ft.*	*in.*	*in.*		
	SOMERSETSHIRE—(*con.*)								
	1.—LOWER AVON—(*con.*)								
D	Bath (Henrietta Park)	Bath Corporation	5	1 0	67	30·3	32·77	204	155
D	Bath (Monkton Combe)	W. G. Lock, Esq.	5	1 0	450	30·3	34·50	229	170
D	Bath (Combe Lodge)	Major T. H. Clark	5	1 0	520	31·4	33·42	191	155
D	Bath (Statutory Hospital)	Bath Corporation	5	1 0	520	32·8	34·43	177	156
D	Bath (Claverton Lodge)	G. Lipscomb, Esq.	5	1 3	375	29·1	31·77	178	153
D	Bath (Lansdown Place)	Lady Stothert	5	1 2	450	31·5	33·24	203	154
D	Bath (Charlcombe)	Philip Porteous, Esq., C.E.	5	1 6	325	31·4	34·61	189	150
D	Whitchurch (The Mead)	N. L. Butt, Esq.	5	0 6	300	..	36·43	204	150
D	Batheaston Reservoir	Philip Porteous, Esq., C.E.	5	1 6	248	31·1	36·45	197	161
D	Batheaston (Sandybank Inn)	F. Lee, Esq.	5	1 0	150	..	38·55	194	164
d	Keynsham (Chewton Road)	A. E. Stephens, Esq.	8	1 0	133	29·6	33·63	..	148
D	Bath (Brockham End)	Mr. H. A. Holland	5	2 0	730	29·9	33·62	213	164
D	Barrow Gurney Reservoir	J. A. McPherson, Esq., C.E.	5	1 0	300	36·2	40·01	198	155
D	Long Ashton (Research Station)	W. H. Neild, Esq.	8	0 8	162	34·1	38·46	225	156
D	Walton (Canok Lodge)	Major F. J. Winter	5	1 0	152	32·2	33·63	184	153
D	Failand House	University of Bristol	5	1 0	390	34·6	39·27	215	168
D	Portishead (Bristol Rd.)	Portishead Dist. Water Co.	5	1 6	24	34·9	32·58	188	150
D	Portishead (St. Mary's Road)	Paul Sinnock, Esq.	5	0 10	67	..	31·92	175	147
	2.—YEO, AXE & BRUE. 405 sq. mi.								
D	Alford Rectory	Rev. A. B. Burney†	5	..	100	30·8	32·78	194	154
D	Somerton (Butleigh Court)	R. Neville Grenville, Esq.	8	1 2	95	30·5	30·82	200	147
d	Bruton (Great Down Cottage)*	F. K. Makins, Esq.	5	1 0	300	..	(33·61)	(212)	(152)
D	Ditcheat Rectory	Rev. H. H. Tripp, M.A.	5	1 0	230	31·5	33·62	204	160
D	Street (Overleigh House)	J. B. Clark, Esq.	5	0 10	100	28·5	29·96	193	145
D	Street (Portway)	J. E. Clark, Esq.	5	1 0	80	..	29·97	207	146
	Street (Wraxhill Corner)	A. H. Clothier, Esq.	5	1 10	70	..	31·56	..	..
D	Street (Millfield) *old g.*	Miss Alice Clark	8	0 6	100	29·5	31·58	180	142
D	Glastonbury (St. Michael's)	Ven. Archdeacon W. Farrer	5	1 0	220	28·8	31·61	211	163
D	Edington	Major A. C. F. Luttrell	5	1 6	90	31·2	32·12	188	160
D	Chilton Polden (West House)	Mr. E. Chick	5	1 0	100	28·5	29·42	207	144
D	Cossington Manor	J. C. Macro Wilson, Esq.	5	1 0	110	..	29·56	193	147
d	Meare	E. J. H. Stott, Esq.	5	1 0	35	..	28·27	(200)	(141)
D	Shepton Mallet (Pilton)	Miss E. M. Allen	5	1 3	354	34·6	32·63	221	165
D	Shepton Mallet (Charlton)	C. E. Burnell, Esq., J.P.	5	1 0	481	38·8	41·20	214	171
D	Shepton Mallet (Field House)	F. H. Berryman, Esq.	5	1 0	500	38·6	41·86	213	182
D	Shepton Mallet (Sewage Farm)	The Surveyor, U.D.C.	5	1 0	330	38·7	40·31	223	175
D	Doulting Vicarage	Rev. H. S. Darbyshire	5	1 0	693	39·8	40·80	229	180
D	Wells (St. Cuthbert's Lo.)	H. W. Laidlay, Esq.	5	1 0	135	..	36·73	214	157
d	Wells (Mental Hospital)	Medical Superintendent	5	1 2	300	..	38·67	..	..
D	Wookey Vicarage	Rev. F. P. Synge	5	2 0	50	33·5	36·90	211	163
D	Blackford (Council School)	E. H. Phillips, Esq.	5	1 0	50	..	30·74	197	144
d	Wells (Wookey Hole Paper Mills)	W. S. Hodgkinson & Co.,Ltd.	5	1 0	200	35·1	37·69	..	..
D	Wookey Hole (Wookey Ho.)	E. T. Wilson, Esq.	5	1 0	200	..	39·09	214	169
D	Burnham (Chalbury)	H. A. Smith Spark, Esq.	5	1 0	20	29·1	32·55	210	156
D	Burnham	W. H. Chowins, Esq., C.E.	8	0 8	24	28·5	31·70	195	156
	Burnham (Berrow Road)	Rev. C. E. B. Fripp	5	1 0	10	29·3	30·33	201	174
D	Burnham (Brent Knoll)	J. Griffith, Esq.	5	2 0	25	30·3	31·90	218	160
D	Cheddar (Pumping Station)	J. A. McPherson, Esq., C.E.	5	1 0	50	33·6	39·53	207	144
w	Charterhouse	J. A. McPherson, Esq., C.E.	5	1 0	619	43·2	48·91	..	..
w	Compton Martin	J. A. McPherson, Esq., C.E.	5	1 0	276	42·4	44·34	..	..
d	Shiphan (Studleigh End)	Miss E. M. Garaway	5	1 0	540	..	44·32	(223)	(167)
w	Ubley (Rookery Farm)	J. A. McPherson, Esq., C.E.	5	1 0	525	44·9	49·87	..	..
D	Winscombe (The Down)	J. Grubb, Esq.	5	1 0	295	35·8	42·14	214	160
D	Banwell (Eversleigh)	Dr. Kenneth Anderson	5	1 6	50	33·9	37·00	215	160
w	Blagdon Hill	J. A. McPherson, Esq., C.E.	5	1 0	550	40·6	45·43	..	..
D	Blagdon (Pumping Station)	J. A. McPherson, Esq., C.E.	5	1 0	112	37·0	40·43	197	152
w	Blagdon (Coombe Lodge)	J. A. McPherson, Esq., C.E.	5	1 0	388	39·6	44·03	..	..

† *Per* Mid-Wessex Rainfall Association. *Previously known as Wyke Champflower.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
			in.	*ft. in.*	*ft.*	*in.*	*in.*		
	SOMERSETSHIRE—(*con.*)								
	2.—YEO, AXE and BRUE—(*con.*)								
w	Nempnett (West Town)	J. A. McPherson, Esq., C.E..	5	1 0	263	36·3	37·70	..	..
w	Burrington (Burrington Links)	J. A. McPherson, Esq., C.E..	5	1 0	335	38·1	42·18	..	..
D	Weston-super-Mare (Clarence Pk.)	W. H. Allen, Esq.	5	1 0	29	29·9	33·40	192	138
D	Churchill (Langford House)	Sidney Hill, Esq., J.P.	8	0 10	90	..	43·71	214	169
w	Butcombe (Cholwell)	J. A. McPherson, Esq., C.E..	5	1 0	370	38·9	38·63	..	..
D	Wrington (The Cottage)	H. C. Bristowe, Esq., M.D..	5	1 0	100	33·2	34·95	196	146
D	West Town (Downside)	Major E. J. Dunscombe.	8	1 4	650	..	36·34	206	156
D	Yatton (Chelvey)	J. A. McPherson, Esq., C.E..	5	1 0	60	32·5	36·06	208	144
D	Backwell Hill	W. Garnett, Esq.	5	1 0	490	33·2	37·00	183	146
D	West Town	Theodore Robinson, Esq...	5	1 0	80	34·6	35·64	207	144
D	Clevedon (Gas Works)	J. Harger Pye, Esq.	5	1 2	22	33·5	27·60	188	140
D	Clevedon W.W. (Tickenham Rd.)	J. Harger Pye, Esq.	5	1 6	70	31·2	31·25	186	146
d	Clevedon (Bowling Green)	Mr. H. H. Brook.	5	0 11	126	33·8	31·62	..	..
D	Clevedon (Mt. Heber Cottage)	G. M. S. Farmer, Esq.	5	1 0	144	34·3	33·40	212	136
D	Wraxall Court	Mr. G. Hyde	5	0 10	200	..	34·18	207	157
	3.—PARRETT. 568 sq. mi.								
D	Chard (High Street Council Sch.)	F. Barnard, Esq.	5	1 2	425	39·1	46·76	203	161
D	Crewkerne (The Reservoir)	E. H. Munford, Esq.	8	1 0	426	33·7	35·66	199	161
D	Crewkerne (Bincombe House)	Mrs. R. H. Symons.	5	1 3	293	34·7	38·36	188	157
D	Crewkerne (Mark's Barn)	Mrs. R. Blake.	8	0 9	260	32·1	30·91	202	152
D	Chaffcombe House	Col. L. H. Noblett.	5	0 10	400	33·1	40·25	230	150
D	Combe St. Nicholas	Rev. G. de Y. Aldridge.	5	1 0	580	38·4	44·10	219	172
	Coker Court Gardens	Mr. T. H. Gilham.	5	1 6	255	33·7	36·99	..	161
D	West Coker	G. F. Deedes, Esq.	5	1 6	265	..	29·79	197	142
D	Ilminster (Whitelackington Ho.)	S. Creed, Esq.	5	3 0	200	33·0	39·47	184	144
D	Ilminster (Dillington Park) (R)	Mr. W. Goldthorpe.	8	3 0	161	..	37·36	173	151
D	Yeovil (Reckleford School)	The Headmaster.	5	2 0	150	..	30·61	177	137
D	Yeovil (Pen Mill Sewage Works)	Dr. C. W. Gee.	5	1 0	102	30·6	33·44	226	158
D	Pitminster (Blagdon Hill)	G. L. Sidey, Esq.	5	0 10	750	..	49·35	227	167
D	Stoke-under-Ham	Miss M. H. Gillett.	9	1 0	80	..	34·04	195	165
D	Angersleigh (Leigh Court)	A. Eastwood, Esq.	8	1 0	360	35·0	42·61	205	157
D	Ashbrittle (Kyrle)	Major J. H. Mathias.	5	0 9	525	..	49·00	229	171
D	Bradford (Stoford Manor)	W. Simms, Esq.	5	0 8	110	..	38·50	167	145
D	Martock Vicarage	Rev. G. W. Saunders.	5	0 9	61	29·6	30·04	184	147
D	Ash (The Grange)	L. C. R. Thring, Esq.	5	1 3	150	..	32·54	184	154
D	Rimpton	P. B. Cardwell, Esq.*	5	1 0	147	..	31·37	218	159
D	Taunton (The Park)	Dr. John Allen.	5	1 0	71	29·5	33·85	219	152
D	Taunton (Holy Trinity School)	A. P. Guest, Esq., M.B.E...	5	1 0	65	29·1	35·12	228	162
	Milverton (Old Halls)	Mrs. Bere	5	1 0	250	..	40·38	208	..
D	Milverton (Spring Grove)	Major R. C. Coldwell.	5	1 0	449	36·7	43·05	224	172
D	Langport (The Grange)	Miss V. M. Page.	5	1 0	50	27·9	28·72	222	149
D	Langport (Council School)	H. G. Jefferies, Esq.	5	1 0	52	28·1	28·13	177	144
D	N. Cheriton (Maperton House)	Mr. W. Smith.	5	1 3	390	35·3	37·97	210	169
D	Somerton (The Grange)	R. W. Pretor-Pinney, Esq..	5	1 0	106	27·8	27·43	182	138
D	Bishop's Lydeard (Watts Ho.)	Sir Dennis Boles, Bart.	5	1 2	320	..	37·25	196	139
D	North Newton	D. W. Hurd, Esq.	5	0 9	50	..	29·94	197	151
D	Aisholt (Timbercombe)	Mrs. White.	5	1 2	700	33·2	40·20	209	168
D	Bagborough Rectory	C. Hubert Lance, Esq.	9	1 0	470	34·1	39·92	230	167
D	Bridgwater (Blake Gardens)	R. A. Watson, Esq.	5	3 1	27	28·5	34·28	197	154
D	Bridgwater (Wembdon Road)	H. Corder, Esq.	5	1 0	30	29·9	33·37	178	146
D	Spaxton (Furzydown)	Mrs. C. Woodhouse.	5	0 9	300	..	36·10	195	151
d	Over Stowey (Quantock San.)	Medical Superintendent.	8	1 0	264	..	38·42	..	..
D	Cannington (Ashford)	R. A. Watson, Esq.	5	1 1	102	31·4	35·74	210	159
D	Fiddington (Keenthorne Ho.)	Capt. A. M. Stancomb, R.N..	5	1 0	250	..	33·16	187	149
D	Cannington (Farm Inst.)	G. E. Furse, Esq.	5	1 0	95	..	31·27	211	146

* *Per* Mid-Wessex Rainfall Association.

DIVISION V—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SOMERSETSHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NORTH COAST STREAMS. 158 sq. mi.								
D Elworthy (Willett)	H. C. Venning, Esq.	5	1 0	450	35·1	39·78	173	159
Quantock Hills (B)	Lord St. Audries	5	1 0	1050	..	45·43	..	..
D Croydon Hall	Capt. J. W. Bridges	5	3 0	600	41·6	46·18	211	167
D Bicknoller (Ford)	John Tracey, Esq.	5	1 2	150	33·0	38·71	221	158
D Bicknoller (Weacombe Ho.)	O. T. Sadler, Esq.	5	1 0	320	..	35·77	167	157
d Holford	Miss W. J. Malet	5	..	400	..	(39·31)	..	..
Williton (Aller Farm)	R. G. Hosegood, Esq.	5	3 0	175	32·4	38·14	177	154
D Williton (The White House)	S. L. Rogers, Esq., J.P.	5	1 0	97	30·6	36·07	197	154
D Kilve Court	Mrs. Cooke Hurle	5	1 0	150	30·0	36·16	184	152
D Stogursey	Dr. P. Hallam	5	0 8	145	..	33·16	198	144
D Stogursey (Fairfield House)	Lord St. Audries	5	1 0	150	31·1	33·16	201	149
D Dunster	P. R. Day, Esq.	5	1 0	160	33·0	41·78	200	155
d Stolford (Whitewick Farm)	C. Mackenzie, Esq.	5	1 0	10	..	30·97	..	135
D Minehead (Blenheim Gardens)	A. Douglas Barron, Esq.	5	1 0	40	..	35·71	193	156
D Minehead (The Parks)	Dr. R. L. Robinson	5	1 0	90	..	34·59	192	153
D Porlock (Lynch Mead Allerford)	J. Dyke Acland, Esq.	5	1 3	113	34·6	37·33	248	170
D Porlock (Bush Steep)	Mrs. W. P. Holmes	5	0 9	130	43·2	40·88?	229	160
d West Porlock (Underway)	N. G. Hadden, Esq.	5	1 0	80	44·2	52·15	(184)	(159)
D Culbone (Lillycombe)	E. T. MacDermot, Esq.	5	1 0	1210	50·5	59·44	246	201
5.—EXE. 122 sq. mi.								
d Churchstanton	Mrs. Hughes	5	1 0	800	..	(52·08)	..	..
D Churchstanton (Widcombe)	G. Clinton Baker, Esq.	8	0 11	850	..	47·92	214	166
D Exbridge	G. C. Hartly, Esq.	5	3 0	410	44·1	50·09	214	174
D Brushford Rectory	Rev. B. J. du Boe	5	1 0	450	44·3	53·40	213	206
D Brushwood Nurseries	Mr. G. Ruff	5	1 2	430	44·1	49·85	247	177
D Dulverton C.E. School	C. J. R. Weaver, Esq.	5	0 9	550	..	58·79	226	198
D Hawkridge (Liscombe)	Mr. E. W. Darby	5	1 6	980	57·8	59·20	243	198
D Winsford	Capt. R. S. Le Bas	6	1 0	620	..	62·61	221	184
d Exton (Stone Lo.)	R. H. Arundell, Esq.	5	1 0	1100	..	50·91?	..	..
D Cutcombe (Wheddon Cross)	W. J. Tovey, Esq.	5	1 6	945	49·5	58·95	216	190
Exford (North Ley)	F. G. Heal, Esq.	5	1 6	1000	54·8	64·51	..	..
6.—AXE. 42 sq. mi.								
D Wayford Manor	H. L. P. Baker, Esq.	5	0 10	400	..	43·80	179	163
D Cricket St. Thomas	Mr. C. G. Rose	5	1 0	444	39·3	41·24	194	161
7.—STOUR. 35 sq. mi.								
D Temple Combe Rectory	Rev. Preb. R. W. Windsor	5	1 0	250	34·9	36·28	204	168
D Temple Combe (Cheriton Ho.)	W. Wise, Esq.†	..	..	..	31·1	35·43	198	174
D Wincanton (Roundhill Grange)	Maj.-Gen. C. H. P. Ducat	5	1 11	375	32·7	36·05	216	167

DIVISION VI—WEST MIDLAND COUNTIES.

GLOUCESTERSHIRE. (Area, 1,243 sq. mi.)								
1.—WYE. 50 sq. mi.								
D Chepstow (Castleford)	Mrs. W. R. Lysaght	5	0 11	146	..	39·31	211	160
D St. Briavels (St. Briavels House)	Surg.-Cpt. O. W. Andrews, R.N.	5	1 0	750	..	49·71	212	160
D Forest of Dean (Mailscot Lodge)	Office of Woods	8	1 4	630	..	50·81	242	175
D English Bicknor (Bicknor House)	T. F. Harvey, Esq.	5	1 0	490	..	39·10	199	147
D Lydbrook (Viaduct House)	G. S. Damsell, Esq.	5	1 0	95	..	36·93	224	153
2.—SEVERN—Right Bank Tributaries. 176 sq. mi.								
D Lydney (Clanna Cottage)	Brig.-Gen. A. M. Tyler, C.M.G.	8	0 10	359	..	45·06	205	156
d Forest of Dean (Whitemead Pk.)	Office of Woods	8	1 0	200	..	42.45	(200)	(152)
D Forest of Dean (Blakeney Hill Lo.)	Office of Woods	8	1 0	500	..	35·10	185	157
D Forest of Dean (Worcester Lo.)	Office of Woods	8	0 11	712	..	43·32	208	154
D Coleford (Cannop Colliery)	J. J. Joynes, Esq.	5	10 0	300	..	41·78	203	152
D Westbury-on-Severn (Elton)	Samuel Bullock, Esq.	5	1 4	85	..	36·52	178	144
D Westbury-on-Severn (Ninnage L.)	Miss N. E. Grant	5	1 0	120	..	33·44	200	154
D Forest of Dean (Edgehills Lodge)	Office of Woods	8	1 0	915	..	42·61?	208	166
D Newent (Clifford Manor)	J. R. Glasson, Esq.	5	2 0	325	..	35·82	168	144
D Newent (Taynton)	M. Philips Price, Esq.	5	1 0	50	..	32·42	170	141
D Oxenhall (Dymock Woods)	Office of Woods	8	1 0	232	..	30·64	183	132
D Bromsberrow Heath Pump. Stat.	W. Osborne Thorp, Esq., C.E.	5	1 0	181	..	33·15	175	131
D Tewkesbury (Forthampton Ct.)	Mr. B. Webster	5	1 0	48	..	29·76	210	156
D Tewkesbury (Upper Lode)	J. E. Bradley, Esq.	5	1 0	41	25·2	27·28	187	135

† *Per* Mid-Wessex Rainfall Association.

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
GLOUCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—SEVERN—Left Bank Tributaries. 372 sq mi.								
D Chipping Sodbury (Horton Hall)	Colonel P. Burges	5	1 0	380	31·5	32·42	200	160
d Thornbury (Thornbury House)	H. V. Gillett, Esq.	5	1 0	110	..	33·31	(189)	(140)
D Thornbury (Thornbury Park)	Capt. R. A. Bennett	5	1 3	70	..	33·14	193	143
D Tortworth Court	Mr. J. Banting	8	1 0	264	..	32·58	195	152
D Tortworth School	E. A. Smith, Esq.	5	1 6	264	..	32·57	189	148
D Wotton-under-Edge (Claremont)	late R. Penney, Esq.	5	1 0	350	..	29·66	210	149
d North Nibley (Nibley House)	Lt.-Col. J. D. Buckton, V.D.	5	1 0	380	..	31·81	..	152
D Dursley (The Manor)	Miss H. M. Hutton	5	1 0	274	31·8	33·07	204	167
D Avening House	Lady Eleanor Byng	8	1 3	350	31·6	33·13	171	145
D Avening (Gatcombe)	Colonel H. G. Ricardo	6	1 0	550	..	33·19	188	159
D Berkeley Castle Gardens	Mr. T. B. Ashbee	5	1 6	60	..	30·96	168	134
D Nailsworth (Three Corners)	F. R. Rushton, Esq.	5	0 9	325	33·4	33·88	213	156
D Berkeley (Sharpness Docks)	A. J. Cullis, Esq., C.E.	5	1 3	50	..	32·83	175	130
D Minchinhampton (The Shard)	E. H. Denne, Esq.	5	0 8	500	31·4	33·67	195	153
D Minchinhampton (Rectory Cott.)	G. W. Fisher, Esq.	5	1 0	610	..	35·95	207	157
D Minchinhampton (Camp Field)	Miss B. M. Legh	5	1 6	640	32·9	37·11	219	157
D Frocester Manor	Capt. J. E. H. Graham-Clarke.	5	1 3	80	25·8	28·06	173	135
D Stroud (Stanley Park Gdns.)	Sir P. S. Marling, Bt., V.C., C.B.	8	1 0	365	..	35·14	186	170
D Stonehouse (Wycliffe College)	W. A. Sibly, Esq.	5	1 0	120	28·5	29·41	190	139
Stroud (Berrimans)	E. Armitage, Esq.	5	1 0	750	33·2	36·51	..	..
D Stroud (Slad)	Rev. W. A. Jones	5	1 0	400	..	34·32	204	152
D Stonehouse (Parklands)	W. Grey Robinson, Esq., J.P.	5	2 6	103	26·9	28·27	203	146
M Stroud (Lypiatt Park)	Mr. A. J. Buck	5	1 3	820	..	34·10	..	..
D Miserden Park	Major V. J. Dawson	5	1 2	750	..	38·36	194	156
D Witminster (The Junction)	A. J. Cullis, Esq., C.E.	5	1 0	32	..	32·15	206	152
D Haresfield Court	Miss Tidswell	5	0 10	100	..	34·72	204	156
D Harescombe Grange	Stamford Hutton, Esq.	5	1 0	557	28·7	30·91	198	152
D Quedgeley House	Miss M. F. Curtis-Hayward	5	1 3	65	27·9	29·29	205	151
D Witcombe Reservoir	C. J. Scudamore, Esq., C.E.	8	1 0	297	29·2	30·11	201	141
D Brockworth (The Kia)	Mrs. Grace Buckle	5	1 4	220	..	28·28	182	130
D Gloucester (The Park)	R. H. Ellis, Esq.	5	1 3	56	..	27·00	185	139
D Gloucester (Llanthony Lock)	J. E. Bradley, Esq.	5	1 2	39	..	27·33	159	134
D Gloucester (Maisemore Lock)	J. E. Bradley, Esq.	5	1 1	39	..	26·64	189	140
D Churchdown (Barrow Hill)	Mrs. J. H. Jones	5	1 0	225	..	28·95	201	133
D Dowdeswell Reservoir	J. S. Pickering, Esq., C.E.	5	1 3	357	..	35·43	180	144
D Cheltenham (Thirlestane H.) (R)	J. Player, Esq.	8	2 0	240	..	33·86	197	139
D Charlton Kings (The Grange)	Miss E. M. Heberden	5	0 9	300	..	35·69	209	144
D Cheltenham (Hewletts Res.)	J. S. Pickering, Esq., C.E.	8	1 6	419	..	33·09	193	143
D Cheltenham (Sandford Mead)	J. S. Pickering, Esq., C.E.	5	2 6	210	..	33·43	176	134
D Cheltenham (Montpellier Gds.)	Town Clerk	5	1 0	214	26·5	33·96	190	144
d Cheltenham (Suffolk Square)	Rev. Preb. H. T. Williamson	5	1 0	227	..	(28·17)	(181)	(130)
D Cheltenham (Swindon)	J. C. M. Stanton, Esq.	8	1 2	136	..	29·27	190	136
D Tewkesbury Pumping Station	J. S. Pickering, Esq., C.E.	5	1 0	47	..	25·55	192	142
4.—SEVERN—Upper Avon. 99 sq. mi.								
d Winchcombe (Sudeley Castle)	Major J. H. D. Brocklehurst	5	1 0	357	..	32·68	..	141
D Broadway (Buckland Manor)	Mr. J. Whiteley	5	1 0	300	..	31·39	172	140
5.—LOWER AVON & C. 198 sq. mi.								
D Bath (Monkswood Reservoir)	Philip Porteous, Esq., C.E.	6	1 6	365	..	35·53	215	159
D Bristol (Tyndalls Pk. Rd.) (+A)	O. W. Dunscombe, Esq.	5	1 4	150	..	34·63	228	154
D Bristol (Sneyd Park)	Mrs. A. M. Tanner	5	1 8	300	..	36·77	195	153
d Bristol (Redland)	late H. A. Rogers, Esq.	5	1 0	180	..	(33·20)	(196)	(146)
D Clifton (Oakfield Road)	J. A. McPherson, Esq., C.E.	5	1 0	200	..	34·24	191	145
D Clifton (All Saints Rd.)	H. T. Coles, Esq.	5	0 11	200	..	37·41	248	163
Bristol (St. Andrew's Park)	H. Vicars Webb, Esq.	5	1 6	200	..	34·60	..	..
D Horfield	G. H. Brown, Esq.	5	1 0	206	..	34·16	199	155
D Shirehampton (Kings Weston)	P. Napier Miles, Esq.	8	1 0	220	..	33·66	190	143
D Filton	F. W. Gayner, Esq.	5	1 0	200	..	32·31	188	155
Winterbourne (Kendleshire)	J. Marsh, Esq.	5	1 0	170	..	31·47	..	..
D Frampton Cotterell (Park Ho.)	H. H. Harding, Esq.	5	1 0	158	..	32·00	203	150
D Badminton Gardens	The Head Gardener	5	0 5	407	..	37·01	188	165
D Almondsbury (Ridgewood)	R. E. Potter, Esq.	5	0 10	200	..	30·27	182	142

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
GLOUCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
6.—THAMES—Right Bank Tributaries. 15 sq. mi.								
7.—THAMES—Windrush & c. 333 sq. mi.								
D Somerford Keynes (Manor Ho.)	F. Fawcett, Esq.	5	0 9	450	..	29·66	181	143
D Fairford (Dunfield, Kempsford)	A. T. Iles, Esq.	5	1 0	260	25·6	27·87	185	163
D Maisey Hampton (The Nest)	W. L. Stanton, Esq.	5	1 1	345	..	30·35	191	141
D Fairford Vicarage	Rev. Canon R. C. S. Jones	5	1 0	280	..	30·01	181	142
Lechlade (St. John's Lock)	Thames Conservancy	5	1 7	237	..	27·83	181	142
D Lechlade (Claydon House)	T. T. S. Metcalfe, Esq.	5	1 0	250	..	26·45	183	142
D Cirencester (Gwynfa)	Nigel Woods, Esq.	5	1 0	354	30·8	33·06	198	146
D Daglingworth Manor	J. Herbert Scrutton, Esq.	8	0 10	450	31·1	36·77	195	151
D Cirencester (Barnsley Pk.)	H. W. Wykeham-Musgrave, Esq.	5	0 9	495	..	34·09	197	157
D Aldsworth	T. Rich, Esq.	5	1 6	430	..	31·47	176	151
D Great Barrington	H. J. Barrett, Esq.	5	1 6	417	..	32·97	183	144
d Northleach (Sherborne House)	Mr. A. Mitchell	5	1 0	420	30·7	32·03	..	148
D Northleach (Leygore Manor)	Arthur E. Moss, Esq.	5	1 0	650	..	33·35	221	150
D Bourton-on-Water (Eastfield)	E. W. Kendall, Esq.	5	1 6	434	..	32·48	180	138
D Bourton-on-Water (Chardwar)	Miss A. B. Moore	5	1 0	430	..	34·27	190	123
d Bourton-on-Water (Rectory)	Canon W. E. White	5	0 10	433	..	31·41	..	120
D Stow-on-the-Wold (Icomb Place)	Capt. G. H. Simpson Hayward	8	1 3	500	..	33·28	179	147
D Winchcombe (Temple Guiting Ho.)	Major C. Stacey	5	1 3	700	..	36·04	194	151
HEREFORDSHIRE. (Area, 840 sq. mi.).								
1.—WYE. 685 sq. mi.								
D Goodrich Court Gardens	Mrs. G. R. Trafford	5	1 8	200	29·7	36·02	184	155
Walford (Hill Court)	late G. R. Trafford, Esq.	5	1 1	161	28·4	33·01	192	134
D Ross (County Observatory). (+A)	F. J. Parsons, Esq.	5	1 0	223	27·4	32·56	195	130
D Ross (Birchlea)	Miss M. L. Southall	5	1 0	210	28·2	33·89	212	156
D Bridstow (Ashe Leigh)	Major W. Stanley R. Cox	5	1 0	230	27·4	34·17	201	150
d Kentchurch School	Mrs. V. A. Evans	5	1 0	200	..	39·40	..	..
D Kentchurch Rectory	Rev. R. P. Dansey	5	1 0	220	34·6	42·85	207	157
D Ross (The Chantry)	M. F. Maclean, Esq.	5	0 10	475	..	33·11	208	143
d Perrystone Court	Major-Gen. G. S. Clive, D.S.O.	5	1 3	450	25·5	30·86	..	124
Brockhampton Court	Mrs. A. W. Foster	8	1 0	500	27·7	32·24	..	..
D Fownhope (Morney Cross)	A. P. Maudslay, Esq., D.Sc.	5	1 6	200	..	33·31	211	137
D Vowchurch (Ladywell House)	A. S. Wood, Esq.	5	1 0	400	34·9	42·77	203	148
D Hereford (Belmont Abbey)	The Abbot	8	1 0	292	27·6	35·05	200	140
D Hereford (Barton House)	Rev. A. G. Jones	8	1 0	179	26·3	34·18	205	140
D Hereford (Breinton Court)	Mrs. R. E. H. Baily	5	1 0	238	25·9	32·24	211	133
d Tarrington (Alder's End)	J. H. Whiting, Esq.	5	1 2	360	..	36·38	184	149
D Dorstone (Oaklands)	Robert Gray, Esq.	5	1 0	486	..	43·75	222	156
D Hereford (Holmer Hall)	Miss M. S. Hopton	8	1 3	244	25·1	34·12	194	151
Tyberton Court	Major C. B. L. Warner	5	0 10	276	..	38·44	188	152
D Credenhill (Stretton Sugwas)	Capt. S. H. Armitage	5	1 0	226	25·8	34·46	209	159
d Credenhill	F. E. Whiting, Esq.	5	1 5	275	27·5	35.40	..	149
D Burghill	F. Boddington, Esq.	5	1 0	310	..	31·30	181	145
D Ocle Pychard (Ocle Court)	G. Cresswell, Esq.	8	1 0	298	27·8	35·84	215	144
D Sarnesfield Court	Rev. W. Marshall	5	1 0	378	..	32·69	192	137
D Weobley School	A. J. Dean, Esq.	5	1 0	320	29·5	34·46	236	152
d Pembridge (Moor Court)	C. A. Benn, Esq.	5	1 6	400	..	33·43	..	147
D Pembridge (Burton Court)	Mrs. P. Clowes	5	1 6	400	28·4	34·60	213	158
d Bromyard (Birchyfields)	Lt.-Col. J. E. Knott, D.S.O.	5	1 3	545	..	33·64	..	148
D Bromyard (Dumbleton Cottage)	T. V. Philpott, Esq., M.A.	5	1 0	393	29·0	34·89	189	150
D Kington (Lynhales)	Mrs. R. F. Hibbert	5	1 0	620	..	35·97	206	148
Kington (The Ovals)	S. Robinson, Esq.	5	0 8	700	..	36·34	220	..
D Kington (Hill Court)	J. E. Barendt, Esq.	5	0 8	595	..	40·86	215	163
M Kington (Sunset)	H. Langston, Esq.	5	1 6	495	32·0	36·90	..	..
d Kington (Golf Club)	C. A. Benn, Esq.	5	1 0	1284	..	37·71	..	..
D Humber Rectory	Rev. B. G. Way	5	1 6	450	30·9	34·53	198	147
D Leominster (Hennor)	Capt. L. R. Hibbert	5	1 11	440	..	33·78	210	143
D Leominster (Fairholme)	E. B. Reynolds, Esq.	5	0 9	285	28·5	32·42	188	140
D Kimbolton (Grantsfield)	J. M. Hutchinson, Esq.	5	1 0	424	28·4	33·74	208	146
d Eyton (Old Hall)	R. H. Evans, Esq.	5	0 9	310	27·9	34·31	(207)	(149)

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
HEREFORDSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—SEVERN.—Right Bank Tributaries. 155 sq. mi.								
d Ledbury (Donnington Hall)	Col. C. Spence-Colby, C.M.G.	5	1 0	..	..	32·46	..	131
D Much Marcle (The Mount)	Miss A. M. Charles	5	1 0	240	25·8	31·76	185	141
D Much Marcle (Hall Court)	Mrs. J. J. S. Powell	5	1 0	200	..	34·00	185	131
D Little Marcle Rectory	Rev. A. F. Ealand	5	1 3	166	..	33·18	209	146
D Ledbury (Underdown)	S. H. Bickham, Esq.	5	1 0	307	27·1	34·12	195	148
D Ledbury (The Twerne)	L. J. C. Riley, Esq.	5	0 8	400	..	36·85	211	159
D Colwall (The Downs)	F. M. Day, Esq.	5	1 0	500	..	35·03	176	140
D Colwall (Upper Wyche)	Miss M. E. Coulson	5	0 9	1000	..	37·23	228	165
Cradley (Mill Bank)	Lt.-Col. E. H. Thurlow	5	1 0	320	28·4	33·24	..	127
D Whitbourne School	Miss M. Hall	5	1 0	200	..	34·63	195	141
d Brampton Bryan	A. Wilkinson, Esq.	8	1 3	437	..	(35·96)	..	..
D Leintwardine	E Charnock, Esq.	5	1 6	450	31·9	41·13	227	169
SHROPSHIRE. (Area, 1343 sq. mi.).								
1.—MERSEY.—Weaver. 27 sq. mi.								
2.—DEE. 30 sq. mi.								
D Whitchurch (Fenns Bank)	M. W. Sowden, Esq., C.E.	8	1 0	271	27·1	36·26	196	158
d Overton (Sodylt Hall)	W. H. Horsfall, Esq.	5	1 0	266	29·7	40·03	..	147
3.—SEVERN.—Right Bank Tributaries. 722 sq. mi.								
d Ludlow (Hill Crest)	C. B. Marston, Esq.	5	1 3	350	..	34·91	..	..
D Bromfield (Oakly Park)	Mr. J. R. Francis	5	1 0	300	29·7	36·69	187	161
D Bromfield (Warwick House)	F. Brayshaw, Esq.	5	1 0	320	30·3	36·44	217	163
D Stanton Lacy Vicarage	Miss I. Armitage	5	1 0	304	28·1	37·19	195	145
D Culmington Manor	T. W. Shaw, Esq.	5	1 4	575	29·6	36·09	186	155
D Wistanstow	J. W. Clarke, Esq.	8	1 0	480	..	36·33	192	148
D Burwarton Hall	Rt. Hon. Viscount Boyne	5	0 9	894	33·6	42·51	212	181
D Bishops Castle (Castle Street)	E. Griffiths, Esq.	5	1 0	720	31·0	40·87	208	174
D Church Stretton (Sewage Works)	E. J. Marsh, Esq.	5	1 0	582	33·7	45·00	231	176
D Bishops Castle (More Rec.)	T. More, Esq.	5	1 0	605	..	37·10	195	144
d Bishops Castle (Linley Villa)	T. More, Esq.	5	1 0	700	..	37·72	(210)	(154)
d Church Stretton (St. Margaret's)	Rev. J. H. Kidson	5	0 11	672	..	43·59	..	..
Bishops Castle (Linley Drive)	T. More, Esq.	5	1 0	1025	..	39·08	..	..
D Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	1 0	290	26·7	33·60	192	151
D Chirbury (Marrington Hall)	Lt.-Col. S. D. Price-Davies	5	1 0	490	29·5	34·23	190	152
Shelve Pool	T. More, Esq.	5	1 0	1000	..	(44·50)	..	..
D Church Preen (Preen Cottage)	Miss Edith Hopkins	5	1 0	760	29·1	37·54	194	166
D Church Stretton (Woolstaston)	Mrs. Mathews	5	1 3	745	31·9	43·71	208	167
D Much Wenlock (Willey Park)	Col. Lord Forester	5	3 0	492	28·2	34·19	208	147
D Dorrington School	J. A. Narraway, Esq.	5	1 2	250	..	33·06	247	155
D Shrewsbury (Beckbury House)	G. H. Horsfall, Esq.	5	0 9	220	22·1	32·64	196	157
D Shrewsbury (Radbrook Hall)	Maj. D. D. Macpherson, J.P.	5	0 8	235	24·3	31·22	215	151
D Shrewsbury (Longden Road)	W. Deedes, Esq.	5	1 6	250	..	31·05	180	139
D Shrewsbury (Monkmoor)	The Medical Officer	8	1 0	184	..	34·34	207	151
4.—SEVERN.—Left Bank Tributaries. 564 sq. mi.								
Bridgnorth (Coton Hall)	Capt. W. Colville	5	1 6	460	27·8	35·54	191	153
D Bridgnorth (Quatt)	G.C.Wolryche-Whitmore,Esq.	5	1 6	250	..	34·73	198	150
D Ackleton (The Folley)	H. J. Bath, Esq.	5	1 0	230	..	31·73	216	146
D Ackleton House	F. J. Neale, Esq.	8	1 3	270	..	31·34	210	140
D Shifnal (Hatton Grange)	Mr. G. Risebrow	5	1 6	262	26·1	32·87	212	152
D Shifnal (Cosford W. W.)	B. L. McMillan, Esq., C.E.	5	0 11	222	..	30·39	199	145
D Shifnal (National Schools)	T. F. Chard, Esq.	5	1 5	283	28·2	32·24	201	153
d Wellington W. W. (Wrekin Res.)	W. Walker, Esq.	8	2 6	478	25·7	33·71	..	141
D Shrewsbury (Copthorne)	W. H. Purslow, Esq.	8	1 0	252	..	30·53	187	136
D Shrewsbury (Coton Hill)	Dr. M. Gepp	5	1 1	190	22·1	30·19	195	145
D Shrewsbury (Roden)	J. W. Nowell, Esq.	8	1 2	209	25·2	33·38	210	157
Shrewsbury (Fitz Rectory)	Rev. W. Brewster	5	1 2	238	26·2	32·98	184	..
D Newport (Aston Hall)	Col. R. Leeke	5	0 11	280	27·7	33·83	198	149
D Newport (Agricultural College)	The Principal	5	1 0	211	24·8	33·20	199	143

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SHROPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—SEVERN—Left Bank Tributaries—(*con.*).								
D Newport (Chetwynd Park)	Mrs. Burton Borough	5	1 0	240	28·3	35·24	211	171
D Hadnall (Hardwicke)	E. L. Bingham, Esq.	5	1 0	273	..	39·70	185	156
D Grinshill (Sansaw Hall Gardens)	Capt. F. B. Bibby	5	0 10	300	25·7	39·26	215	180
D Myddle (Marton Hall)	Major R. W. Doyne	5	0 9	280	27·4	36·47	186	161
D Cheswardine (Knighton Res.)	Canal Engineer, L.M.& S.R.	8	1 0	351	30·0	36·64	206	163
D Cheswardine Hall	Col.R.C.Donaldson-Hudson..	5	1 6	530	28·6	36·47	212	150
D Oswestry (Mount Res.)	G. W. Lacey, Esq., C.E.	5	1 0	698	34·5	46·69?	219	167
D Oswestry (Council School)	E. Compton, Esq.	5	1 0	450	32·4	38·69	198	165
D Norton-in-Hales School	Chas. Chadwick, Esq.	5	1 3	350	30·5	39·46	237	177
STAFFORDSHIRE. (Area, 1,171 sq. mi.)								
1.—MERSEY—Weaver. 50 sq. mi.								
D Biddulph Grange	G. N. Lea, Esq.	5	1 4	570	36·0	41·36	216	176
2.—SEVERN—Left Bank Tributaries. 160 sq. mi.								
D Kinver (Prestwood)	F. J. Dixon, Esq., C.E.	5	1 0	179	..	32·49	185	145
D Kingswinford (Ashwood P.S.)	F. J. Dixon, Esq., C.E.	5	1 0	207	24·9	32·77	198	148
D Dudley (Shavers End)	F. J. Dixon, Esq., C.E.	5	1 0	745	..	36·01	189	154
D Penn (Church Hill)	Mrs. H. N. Fowler	5	1 1	500	..	34·98	211	154
D Wolverhampton (West Park)	Dr. R. H. H. Jolly	5	0 10	430	27·1	34·25	204	149
D Tettenhall (The Hollies)	R. C. Sikes, Esq., C.E.	5	1 0	355	26·7	36·97	213	147
D Tettenhall Waterworks	B. L. McMillan, Esq.	5	0 10	468	..	34·89	193	154
D Patshull Park	Earl of Dartmouth, K.C.B..	8	1 4	279	26·8	33·65	201	153
D Shifnal (Weston Park)	Earl of Bradford	5	1 6	400	27·3	34·46	223	150
D Norbury Junction	Canal Engineer, L.M. & S.R..	5	1 0	332	28·0	36·50	226	158
D Market Drayton (Old Springs)*old g.*	F. E. Harding, Esq.	5	1 4	422	28·9	37·28	223	158
D Maer Hall Gardens	Miss Harrison, M.B.E.	8	1 3	390	32·5	44·08	180	166
3.—TRENT—Right Bank Tributaries. 518 sq. mi.								
D West Bromwich (+A)	A. D. Greatorex, Esq., C.E..	8	1 7	543	26·1	34·31	181	144
D Wednesbury (Ocker Hill)	Birmingham Canal Navig'n.	5	1 0	476	24·8	36·32	201	152
D Walsall (Bescot Sewage Farm)	J. Taylor, Esq., C.E.	5	0 11	376	26·9	37·21	219	147
D Walsall (Wednesbury Sew. Wks.)	G. Wicks, Esq.	5	1 0	378	27·9	35·93	200	145
D Walsall (Gorway)	J. Cleland, Esq.	5	1 0	440	..	34·35	167	139
D Darlaston (Sewage Works)	S. E. Hammonds, Esq.	8	1 6	393	..	33·99	186	140
D Bilston (The Lunt Outfall)	A. F. B. Sidwick, Esq., C.E..	8	1 0	419	27·3	34·71	204	143
D Aldridge (Bourne Vale)	F. J. Dixon, Esq., C.E.	5	1 0	419	25·1	35·77	177	142
D Shenstone (Little Hay)	F. J. Dixon, Esq., C.E.	5	1 0	298	..	36·01	173	143
D Bloxwich (Sneyd Reservoir)	Birmingham Canal Navig'n.	5	1 0	507	25·5	39·60	199	162
D Brownhills	S. Harrison, Esq., C.E.	8	1 0	492	26·8	44·06	211	151
D Brewood (Slade Heath P.S.)	F. J. Dixon, Esq., C.E.	5	1 0	340	24·9	34·67	183	148
D Hammerwich (Cannock Ch. Res.)	Birmingham Canal Navig'n.	5	1 0	475	25·3	38·25	195	149
D Brewood (Belvide Reservoir)	Canal Engineer, L.M.&S.R..	5	1 0	367	..	35·42	210	158
D Bishopswood	Rev. A. E. Brown	5	1 2	420	..	32·34	216	143
D Lichfield (St. John Street)	Dr. F. M. Rowland, C.B.E...	5	1 0	269	27·5	34·16	215	148
D Hednesford (Scout House) *new g.*	F. J. Dixon, Esq., C.E.	5	1 0	702	..	39·23	197	142
D Rugeley (Longdon Lodge)	F. J. Dixon, Esq., C.E.	5	1 0	413	26·1	36·23	182	154
D Lichfield (Hanch Reservoir)	F. J. Dixon, Esq., C.E.	5	1 0	259	..	33·39	189	141
Brereton	J. H. Lowery, Esq.	5	1 3	300	..	37·29	..	..
D Rugeley (Brindley Bank)	F. J. Dixon, Esq., C.E.	5	1 0	254	26·3	34·63	187	148
D Rugeley (Nethermoor)	G. H. Grummitt, Esq.	5	1 0	300	..	37·13	196	151
D Milford Waterworks	W. Plant, Esq., C.E.	5	1 0	246	27·5	36·40	206	163
D Shugborough	The Earl of Lichfield	5	1 0	260	30·1	38·09	194	156
D Stafford (Corporation Depot)	W. Plant, Esq., C.E.	5	1 6	249	27·2	36·50	192	153
Stafford (Stone Road)	L. Wilson, Esq.	5	0 8	265	..	35·49	..	..
D Eccleshall (Johnson Hall)	Major W. Moat	5	1 2	400	27·5	36·89	204	157
d Stone (Meece House)	Head Gardener	5	1 2	750	28·3	35·31	..	..
D Stone (Meaford Hall)	Lt.-Col. W. S. W. Parker Jervis, D.S.O.	5	0 10	325	29·9	42·19	229	175
D Standon (Hatton W.W.)	R. C. Frain, Esq., C.E.	5	1 0	355	29·0	39·26	221	172
D Whitmore, Pumping Station	L. M. & S. Rly.	5	1 0	385	..	37·24	199	167
D Basford (Sewage Works)	Thomas Dunn, Esq.	5	1 0	385	..	38·48	202	155

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	STAFFORDSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—TRENT—Left Bank Tributaries. 193 sq. mi.								
D	Burton Reservoir	F. J. Dixon, Esq., C.E.	5	1 0	309	25·1	33·60	176	138
D	Burton (Shobnall)	Messrs. Bass & Co., Ltd.	5	1 0	157	24·6	33·26	186	138
D	Burton (Borough Hospital)	Dr. J. M. Cowie	5	1 0	220	..	36·55	200	154
D	Stone (Alleyne's Grammar Sch.)	H. Malcolm Fraser, Esq.	5	1 0	415	29·4	36·79	210	157
d	Stone (Idlerocks)	Mrs. Wedgwood	5	1 0	740	32·7	40·06	..	155
D	Longton (The Meir)	R. C. Frain, Esq., C.E.	5	1 0	617	30·2	40·44	208	157
	5.—TRENT—Dove. 250 sq. mi.								
D	Rocester (Dove Leys)	Sir Percival Heywood, Bt.	5	1 6	350	33·5	43·55	199	163
D	Oakamoor (Lightoaks)	M. A. Bolton, Esq.	5	1 6	650	..	43·41	206	164
D	Ashbourne (Mayfield House.) (+A)	Graham C. Lawson, Esq.	8	1 0	374	32·3	41·70	205	150
D	Ilam School	J. R. McKnight, Esq.	5	0 8	450	..	50·06	217	170
D	Cheddleton (County Mental Hosp.)	Mrs. Menzies	5	1 0	550	..	45·11	214	179
D	Alstonfield (The Manor)	B. R. S. Pemberton, Esq.	5	1 0	920	39·1	47·62	232	179
D	Leek (Wall Grange P. Stn.)	R. C. Frain, Esq., C.E.	5	1 0	457	34·7	43·43	215	171
D	Leek (Hillesdon)	A. Y. Worthington, Esq.	5	1 0	750	37·2	44·80	220	176
D	Leek (Haregate Hall)	Mr. R. Sutton	5	0 9	680	36·9	45·80	216	175
M	Leek (Swains Moor)	W. E. Beacham, Esq.	5	1 1	993	..	50·30	..	..
M	Leek (Withens, Upper Hulme)	W. E. Beacham, Esq.	5	1 1	1084	..	47·60	..	..
	WORCESTERSHIRE. (Area, 751 sq. mi.)								
	1.—SEVERN—Right Bank Tributaries. 231 sq. mi.								
D	Redmarley (Haselden)	Miss F. L. Newbury	5	0 5	280	25·3	31·53	191	157
D	Upton-on-Severn (Willow Bank)	J. Selwyn Cowley, Esq.	5	1 0	43	26·0	31·27	211	153
D	Upton-on-Severn (The Eades)	Roger D. Tennant, Esq.	5	0 9	100	26·9	30·14	230	143
D	Malvern (British Camp Res.)	W. Osborne Thorp, Esq., C.E.	5	1 0	667	28·5	31·65	176	131
D	Malvern (Barnard's Green)	W. Osborne Thorp, Esq., C.E.	5	1 0	130	..	34·88	183	135
D‖	Malvern (Belle Vue House)	A. Mander, Esq.	5	4 0	520	29·4	37·18	200	148
D	Malvern (Free Library)	W. Osborne Thorp, Esq., C.E.	5	1 0	377	27·6	36·42	195	150
D	Malvern (Clarence Road)	late S. Bottomley, Esq.	5	1 0	300	27·7	35·50	211	152
D	Malvern (St. James' Road)	Rev. F. H. Fowler	5	1 6	300	..	36·23	198	157
D	Malvern (Hornyold Road)	Rev. T. Wolseley Lewis.	5	1 0	492	28·3	33·11	192	140
D	West Malvern	W. Osborne Thorp, Esq., C.E.	5	1 0	832	28·9	35·70	186	143
D	Knightwick Sanatorium	Dr. H. Gordon-Smith	5	1 0	300	25·9	33·81	180	144
D	Worcester (Diglis Lock)	J. E. Bradley, Esq.	5	1 0	49	24·7	32·13	182	135
D	Martley Rectory	Rev. J. F. Hastings	5	1 0	220	26·7	34·36	193	141
D	Ombersley (Holt Lock)	J. E. Bradley, Esq.	5	1 1	55	25·3	31·38	182	138
d	Stanford Rectory	Rev. J. B. Hewitt	5	1 1	360	28·4	33·55	..	136
D	Stourport (Astley Town)	J. Armytage Batley, Esq.	5	0 11	175	25·5	32·17	201	142
D	Tenbury (Belle Vue)	F. Lowe, Esq.	5	1 0	313	26·3	33·22	186	142
D	Rochford Rectory	Rev. Allan Ellison	5	1 0	315	27·7	35·58	206	152
D	Stourport (Dunley Hall)	Sir Sidney Lea, Bt.	5	1 0	240	..	33·05	176	140
D	Bewdley (Winterdyne)	Miss K. M. Sturt	5	1 0	175	25·9	35·95	240	156
	2.—SEVERN—Left Bank Tributaries. 194 sq. mi.								
D	Earl's Croome (Levant Lodge)	F. W. Burnett, Esq.	5	2 0	110	26·3	28·81	194	141
d	Kempsey (Napleton Ho.)	Major H. Berkeley Hill.	5	1 3	100	26·9	29·38	..	132
D	Kempsey Vicarage	Rev. E. B. R. de Jersey.	5	0 9	50	..	32·29	196	141
D	Worcester (London Road)	Mrs. Manley Power	5	1 0	150	25·2	33·26	208	147
D	Worcester (Waterworks)	W. Ransom, Esq., C.E.	5	1 0	52	23·2	31·08	196	150
D	Worcester (Little Perdiswell)	Miss M. S. Hewitt	5	1 0	100	..	30·74	166	134
D	Worcester (Perdiswell)	The Agricultural Organiser.	5	1 0	95	..	29·52	182	139
D	Worcester (Bevere Lock)	J. E. Bradley, Esq.	5	1 1	52	24·5	29·89	180	138
D	Droitwich (Friar Street Depot)	Borough Surveyor	12	4 0	98	25·4	34·39	175	143
D	Bromsgrove (Tardebigge Res.) *new g*	A. J. Cullis, Esq., C.E.	5	1 0	455	27·5	35·37	230	144
D	Bromsgrove (Burcot P. S.)	R. S. Broadley, Esq.	5	1 0	432	..	36·07	184	149
D	Barnt Green (Upwood)	Miss M. Gibbins	5	1 0	650	..	39·28	220	154
D	Stourport (Lincombe Lock)	J. E. Bradley, Esq.	5	1 0	62	25·6	34·48	182	147
D	Bromsgrove (Washing Stocks P. S.)	R. S. Broadley, Esq.	5	1 0	366	..	36·83	188	145
D	Bewdley (C. E. School)	J. Bates, Esq.	9	1 0	70	26·4	34·88	193	147

‖ Exposure not orthodox.

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	WORCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—SEVERN—Left Bank Tributaries—(*con.*).								
D	Kidderminster (Pumping Stn.)	J. T. Cowderoy, Esq.	5	1 0	103	..	32·93	192	145
D	Kidderminster (Park Hall)	K. H. Wilson, Esq.	5	1 0	200	25·7	34·79	190	151
D	Bewdley (Elan Aqueduct)	J. W. Wilkinson, Esq., C.E.	5	1 0	91	26·7	36·76	193	156
D	Clent Hall	Miss H. M. Wilson	5	1 0	580	..	37·97	190	158
D	Halesowen (Romsley)	F. J. Dixon, Esq., C.E.	5	1 0	614	30·6	38·88	200	155
D	West Hagley (Glenthorpe)	W. Nock, Esq.	5	1 0	400	28·1	37·58	215	159
D	Pedmore (The Dene)	T. Grazebrook, Esq.	5	0 9	340	26·5	35·45	190	155
D	Stourbridge (Pumping Station)	G. P. Deeley, Esq.	8	1 0	212	27·1	38·65	196	149
D	Netherton (Lodge Farm Res.)	Birmingham Canal Navig'n.	5	1 0	445	..	34·34	212	150
D	Dudley (Priory Hall)	F. H. Gibbons, Esq., C.E.	8	1 0	584	..	35·66	198	155
	Dudley (Trindle House) *new g*	S. Staffs. Mines Drain. Comrs.	5	1 0	575	..	37·33	..	..
	3.—SEVERN—Upper Avon. 260 sq. mi.								
D	Blockley	Miss E. M. Richardson	5	1 0	500	..	35·61	178	136
D	Bredon (The Croft)	Jasper Lambert, Esq.	5	1 1	120	24·5	30·46	209	150
d	Defford (Upper St.)	A. W. Butler, Esq.	5	2 6	107	24·0	(27·33)	(192)	(140)
D	Evesham (Bengeworth)	Messrs. Ross Bros., Ltd.	5	1 0	128	22·9	30·63	196	147
D	Evesham (Lansdowne)	Miss E. M. Burlingham	5	1 0	108	23·4	34·41	177	133
D	Evesham (Sewage Works)	J. Abbott, Esq., C.E.	5	1 9	85	22·6	28·24	174	138
D	Evesham (Worcester Rd.)	H. B. Pollard, Esq.	5	1 0	..	22·6	27·85	175	136
D	Evesham (Port St.)	Messrs. Craven & Co.	5	1 0	100	..	29·52	192	154
D	Tredington	N. H. Walton, Esq.	5	1 0	200	..	28·45	181	135
d	Pershore (Southern House)	Miss G. E. Lawson	5	2 3	70	22·2	28·84	..	..
d	Pinvin	J. T. Coates, Esq.	5	1 6	114	..	31·20	..	..
d	Evesham (Sheriff's Lench)	Dr. G. E. Harthan	5	1 0	350	..	28·10	..	..
	Alcester (Cookhill Co. School)	T. Barber, Esq.	5	1 0	400	24·5	30·55	189	..
D	Redditch (Hewell Gardens)	Mr. F. Molyneux	5	1 0	469	27·7	35·16	201	149
D	Alvechurch (Bordesley Hall)	A. H. Wiggin, Esq.	12	4 0	490	28·5	37·40	185	155
D	Alvechurch (Fairfield)	D. McMichael, Esq., J.P.	5	1 0	400	29·4	37·28	190	147
D	Bromsgrove (Lr. Bittall Res.) *new g*	A. J. Cullis, Esq., C.E.	5	1 0	457	..	37·67	209	154
	4.—THAMES—Windrush & c. 10 sq. mi.								
	5.—TRENT—Right Bank Tributaries. 56 sq. mi.								
D	Halesowen (Frankley)	J. W. Wilkinson, Esq., C.E.	5	0 10	571	30·7	39·33	222	157
D	Northfield (Frankley Lodge Rd.)	A. A. Barnes, Esq., C.E.	5	1 0	548	..	39·82	218	156
D	Oldbury (Barnford Hill Pk.)	W. Greenwood, Esq., C.E.	5	0 9	607	..	38·35	186	164
	WARWICKSHIRE. (Area, 902 sq. mi.)								
	1.—SEVERN—Upper Avon. 603 sq. mi.								
D	Long Compton (Weston Park)	Mrs. H. A. Warriner	8	1 0	510	26·5	29·79	174	146
d	Kineton (Kineton House)	J. Fielden, Esq., J.P.	5	1 6	280	..	29·88	..	150
D	Stratford-on-Avon (Milcote)	F. W. Jones, Esq., C.E.	5	1 6	122	23·6	26·73	172	134
D	Stratford-on-Avon (Shottery Hall)	R. C. Carter, Esq.	8	1 0	140	23·9	29·59	210	140
D	Bidford (Moor Hall) (+A)	E. H. Cubberley, Esq.	5	1 0	125	24·0	30·23	192	137
D	Temple Grafton Court	T. Lonsdale, Esq.	8	1 3	270	24·8	29·79	173	147
d	Alcester (Ragley Hall)	Mr. C. Harding	5	1 0	270	25·8	33·07	..	145
	Ashorne (Victoria Cottage)	G. T. Osborn, Esq.	5	1 0	160	24·7	27·66	..	..
D	Stratford-on-Avon (Snitterfield)	F. W. Jones, Esq., C.E.	5	1 6	274	25·2	26·67	176	128
D	Southam (Stockton House)	G. B. Blyth, Esq.	6	1 4	394	23·1	25·56	180	125
D	Studley College	The Head Mistress	5	0 9	235	27·0	33·76	194	130
D	Warwick Castle Gardens	Mr. H. F. Smale	5	1 0	197	25·3	28·39	175	140
	Leamington (Radford House)	C. E. G. Hatherell, Esq.	5	1 2	240	24·9	28·37	166	135
D	Leamington (Pump Room Gdns.)	Medical Officer of Health	8	1 0	165	24·0	26·77	173	130
	Warwick (Great Pinley)	W. Nixon, Esq.	5	1 0	400	..	28·78	..	..
d	Warwick (Haseley W. W.)	R. Wormell, Esq., C.E.	8	1 3	324	..	27·03	..	132
D	Leek Wootton (The Lodge)	W. F. Mitchell, Esq.	5	1 0	249	..	31·01	195	141
D	Dunchurch Hall	C H. Cooke, Esq.	5	1 0	400	..	27·41	184	133
D	Dunchurch Lodge Gardens	Major H. S. Cayzer	5	1 0	380	24·4	29·02	169	136
D	Stretton-on-Dunsmore (Manor Ho.)	Mrs. Lister-Kaye	5	1 0	280	..	30·60	172	148

DIVISION VI—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WARWICKSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SEVERN—Upper Avon—(*con.*).								
D Rugby (Bilton Grange) *new g*	Mr. J. S. Buckby	5	1 0	400	..	27·84	169	123
D Rugby (Caldecott)	J. R. Rossiter, Esq.	5	1 0	383	25·6	29·99	175	130
D Rugby (Benn Buildings)	W. H. Spicer, Esq., C.E.	5	1 0	400	..	30·06	169	128
d Ryton-on-Dunsmore (Ryton Ho.)	Charles Browett, Esq.	5	1 2	260	26·0	31·73	..	129
D Coventry (Whitley P. S.)	City Engineer, Coventry	8	1 0	238	..	30·70	184	132
D Coventry (Stoke) (+A)	W. R. Griffiths, Esq.	5	1 0	267	..	31·13	181	137
D Coventry (City Hospital)	E. H. Snell, Esq., M.D.	8	1 0	270	26·0	31·10	187	140
D Coventry (Keresley Grange)	Miss H. Rotherham	5	0 10	413	27·0	35·24	248	155
D Astley Vicarage	Rev. I. F. H. Carr-Gregg	5	1 0	440	..	32·82	175	135
2.—THAMES—Windrush & c., 2 sq. mi.								
D Little Compton Manor	Mrs. Leverton Harris	5	1 0	450	..	30·75	175	135
3.—THAMES—Cherwell. 15 sq. mi.								
4.—TRENT—Right Bank Tributaries. 282 sq. mi.								
D Northfield (West Heath Ho.)	J. B. Shewell, Esq.	5	1 4	590	29·3	36·30	201	143
D Solihull (Marsh Cottage)	Ivo L. Currall, Esq.	5	1 0	420	25·8	33·83	203	155
D Northfield (Bartley Res. No. 1)	A. A. Barnes, Esq., C.E.	5	1 0	600	..	39·42	204	157
D Selly Oak (Bournville)	Messrs. Cadbury Bros., Ltd.	8	1 0	469	29·1	36·10	211	146
d Selly Oak (Witherford Way)	Mrs. Neave	8	1 6	530	..	37·73	(208)	(155)
D Selly Oak (Frederick Rd.)	W. Garden, Esq.	5	1 2	540	29·2	37·25	206	154
D Birmingham (Sparkhill)	D. H. Owen, Esq.	5	1 0	425	29·1	36·80	189	142
d Edgbaston (Farquhar Road)	J. C. Wilson, Esq.	5	0 8	550	..	37·62	..	..
D Birmingham (Edgbaston)	A. J. Kelley, Esq.	8	1 6	535	26·5	35·33	203	146
D Edgbaston (Clarendon Road)	H. Brenholz, Esq.	5	1 0	547	..	37·27	212	147
D Birmingham (Carpenter Road)	L. Ashby Bolton, Esq.	5	1 1	480	28·1	35·87	224	152
D Birmingham (Icknield Port)	Birmingham Canal Navig'n.	5	1 0	490	..	35·61	204	143
D Nuneaton (The Quarry)	Miss K. E. Smith	5	1 0	321	..	34·57	194	112
D Ullesthorpe (High Cross)	J. Parker Toone, Esq.	5	1 0	..	..	31·99	191	149
D Whitacre (Birmingham W.W.)	J. W. Wilkinson, Esq., C.E.	5	1 0	269	26·0	30·18	178	134
†D Birmingham (Erdington) *old g*	J. W. Wilkinson, Esq., C.E.	5	1 2	472	..	31·00	200	146
D Birmingham (Erdington) *new g*	J. W. Wilkinson, Esq., C.E.	5	1 0	442	..	34·80	201	146
D Minworth Greaves	Birmingham Drainage Bd.	8	1 0	259	24·3	30·88	193	140
D Nuneaton (Hartshill Sewage Wks.)	R. C. Moon, Esq., C.E.	5	1 2	288	..	32·65	188	139
D Sutton Coldfield (The Park)	Borough Surveyor	5	1 0	370	26·4	36·16	188	149

DIVISION VII—NORTH MIDLAND COUNTIES.

LEICESTERSHIRE. (Area, 824 sq. mi.)								
1.—SEVERN—Upper Avon. 41 sq. mi.								
D Welford (The Reservoir)	Grand Union Canal Co.	5	1 6	430	..	29·63	205	125
Lutterworth (Leicester Rd.)	M. W. Binns, Esq.	5	1 0	430	..	29·94	..	..
d Lutterworth (Waterworks)	A. J. Ross, Esq.	8	1 9	414	..	27·69	..	..
2.—WELLAND. 96 sq. mi.								
D Market Harborough (Rose Hill)	G. O. Nicholson, Esq.	5	1 0	350	..	30·45	171	134
D Kibworth Beauchamp	Dr. E. V. Phillips	5	1 0	390	25.7	30·55	169	137
d Knossington Rectory	Rev. G. G. Wilkinson	5	1 0	580	..	31·33	..	..
3.—WITHAM. 7 sq. mi.								
4.—TRENT—Right Bank Tributaries. 680 sq. mi.								
D Frolesworth	W. P. Widdowson, Esq.	5	1 0	370	..	28·05?	186	128
D Peatling Magna (Peatling Ho.)	Dr. C. Royds Jones	5	1 1	354	..	27·31	182	133
D Hinckley (Edward Street)	E. H. Salter, Esq.	5	1 0	425	..	33·81	226	146
D Wistow Hall Gardens	The Lord Cottesloe, C.B.	5	1 0	309	..	28·37	165	136
D Countesthorpe (Wigston Sew. Fm.)	The Surveyor	8	0 9	257	..	27·19	197	129
D Leicester (Stoughton Drive)	Theodore B. Ellis, Esq.	5	1 0	315	..	27·89	193	135
D Leicester (Town Hall Square) (+A)	A. T. Gooseman, Esq., C.E.	5	1 0	212	..	26·85	168	118
D Leicester City Mental Hosp.	The Steward	8	1 0	266	..	31·44	199	138
D Leicester (Gilroes Cemetery)	A. T. Gooseman, Esq., C.E.	5	1 0	285	..	30·71	179	134

† Gauge over-exposed.

DIVISION VII—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
LEICESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Right Bank Tributaries—(*con.*).								
D Leicester (Groby Road)	Miss V. D. Ellis	5	1 0	244	..	34·11	200	135
D Thornton Reservoir	G. T. Edwards, Esq., C.E.	8	1 2	370	26·2	35·64	174	145
D Cropstone (Bradgate Res.)	G. T. Edwards, Esq., C.E.	8	1 0	245	..	37·71	197	148
D Barkby Hall	Victor R. Pochin, Esq.	5	1 0	227	*26·3*	29·53	192	127
D Swithland (The Brand)	G. T. Edwards, Esq., C.E.	8	1 0	171	..	33·26	187	140
D Barrow-upon-Soar (The Mount)	Mrs. C. Stewart Thomson	5	1 6	..	..	30·51	180	134
D Charnwood Forest (Charley Hall)	Mrs. J. B. Martin	5	0 9	450	..	37·86	168	143
D Hoby (The Grange)	A. A. Ironside, Esq.	5	1 0	235	..	27·36	176	123
D Asfordby Rectory	Rev. W. R. Finch	5	0 10	212	..	26·25	171	125
D Asfordby Hill (Ironworks)	Stanton Ironworks Co., Ltd.	5	1 1	324	..	29·89	175	127
D Melton Mowbray (White Lodge)	H. K. Barker, Esq.	8	1 6	237	..	29·91	195	128
D Charnwood For. (Blackbrook R.)	W. Granger, Esq., C.E.	5	1 0	379	..	35·80	185	146
D Loughborough (Park Road)	W. Llewellyn Mold, Esq.	5	1 0	190	..	32·24	172	122
D Loughborough (Nanpantan Res.)	W. Granger, Esq., C.E.	5	1 0	269	..	33·76	187	137
D Loughborough (The Widenings)	Adrian Young, Esq.	5	1 0	197	..	32·31	210	143
D Loughborough (Sewage Farm)	W. Granger, Esq., C.E.	8	1 0	135	..	32·38	164	133
d Burton-on-the-Wolds (Burton Hall)	Earl of Huntingdon	5	1 0	270	..	31·61	..	146
d Belvoir Castle Gardens	The Duke of Rutland, K.G.	8	1 0	259	25·1	26·11	..	121
RUTLAND. (Area, 152 sq. mi.)								
1.—WELLAND. 125 sq. mi.								
D Uppingham (Ridlington)	C. Wortley, Esq.	5	1 0	527	..	29·04	174	131
d Hambleton Manor	Major J. Orr-Ewing, M.C.	5	1 0	400	..	32·00	..	114
2.—WITHAM. 5 sq. mi.								
3.—TRENT—Right Bank Tributaries. 22 sq. mi.								
LINCOLNSHIRE. (Area, 2,646 sq. mi.)								
1.—NENE. 100 sq. mi.								
D Tydd (North Level Sluice)	Mr. S. Fovargue	5	1 0	10	..	27·66	167	117
2.—WELLAND. 341 sq. mi.								
d Crowland	F. Husband-Clutton, Esq.	5	1 0	10	..	24·23	..	..
D Market Deeping (Wilsthorpe)	W. H. A. Court, Esq., C.E.	8	1 0	51	..	23·83	170	120
D Deeping St. Nicholas	T. A. Pick, Esq.	5	0 11	11	..	22·02	222	120
D Spalding (Pode Hole)	H. Bain, Esq.	8	1 3	12	23·5	25·04	217	127
D Bourne (Guthram)	F. Sanderson Robins, Esq., C.E.	8	1 6	19	..	21·56	174	118
d Spalding (Spalding Marsh)	Messrs. Seymour Cobley, Ltd.	5	0 8	0	..	23·68	..	121
3.—WITHAM & C. 1085 sq. mi.								
d Stainby Rectory	Rev. W. L. de B. Thorold	4	0 9	496	25·5	28·56	..	120
D Denton Manor	Sir C. G. E. Welby, Bt., C.B.	5	1 0	310	*24·9*	27·73	190	131
D Grantham (Saltersford)	H. Preston, Esq.	5	0 6	188	..	27·14	192	126
D Heydour Vicarage	Rev. S. S. Herington	5	0 11	263	..	32·04	214	155
d Culverthorpe	E. H. Davies, Esq.	5	1 2	200	..	30·18	..	
d Fishtoft School	W. Rimington, Esq.	5	1 0	0	..	23·43	..	..
D Boston (Black Sluice, Skirbeck)	F. S. Robins, Esq., C.E.	8	1 3	11	22·8	24·38	182	122
D Boston (Grand Sluice)	late J. H. Johnson, Esq., C.E.	8	8 0	18	23·2	24·76	193	123
D Boston (Bargate End)	A. O. Scrivener, Esq.	8	1 4	9	..	24·36	195	124
D Sleaford (Kesteven Mental Hos.)	Dr. J. R. Macphail	5	1 0	100	..	26·86	185	122
D Cranwell Aerodrome (+A)	The Meteorological Office	8	1 0	240	23·2	27·74	188	126
D Anwick Vicarage	Basil W. Lee, Esq.	5	1 0	37	..	27·96	200	132
d New Leake (Lade Bank Engine)	late J. H. Johnson, Esq., C.E.	5	1 0	10	23·2	23·40	..	122
D Carrington Grange	T. J. Ward, Esq.	5	6 0	15	..	26·58	170	137
D Wellingore	Rev. Canon H. Powell Smith	5	1 0	246	..	27·60	209	117
D Navenby Rectory	J. Thompson, Esq.	5	1 0	218	24·9	29·70	194	135
D Carlton-le-Moorland	J. Brocklebank, Esq.	5	1 2	50	..	27·71	175	115
D Blankney Hall Gardens	Mr. N. G. Cleaver	5	0 9	57	..	28·32	183	137
D East Kirkby (E. Kirkby Manor)	Capt. R. S. Fieldsend	5	1 0	35	..	29·39	200	140

DIVISION VII—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
LINCOLNSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—WITHAM & C.—(*con.*).								
d Revesby Reservoir	T. H. Tyson, Esq.	5	2 0	124	24·5	28·44	..	124
Kirkby-on-Bain	Lt.-Col. J. D. Gibbes	5	1 0	50	..	25·14	..	..
D Woodhall Spa (Galen House)	J. Collins, Esq.	5	1 6	38	..	25·71	191	128
D Woodhall Spa	J. Collins, Esq.	5	1 0	40	..	26·27	181	133
D Horncastle	J. R. Mackavoy, Esq.	5	1 0	120	..	27·59	201	138
D Lincoln (Swallowbeck)	W. R. Pennell, Esq.	8	1 0	34	..	28·11	204	124
D Lincoln (Skellingthorpe Hall)	A. H. Bergne-Coupland, Esq.	5	1 0	40	23·1	28·76	180	128
d Benniworth Rectory	H. Satchell, Esq.	5	1 0	312	..	30·89	(232)	(154)
D Hackthorn Hall	E. W. Cracroft, Esq.	5	4 8	102	..	29·92	195	128
D Springthorpe Rectory	Rev. B. Davies	5	1 0	73	..	29·11	177	139
4.—GREAT EAU & C. 443 sq. mi.								
D Skegness (Marine Gardens)	F. A. Jenkins, Esq.	8	1 0	15	23·3	25·76	167	126
†D East Keal Rectory *old g*	Rev. R. H. Simpson	5	1 0	180	..	26·36	195	128
D East Keal Rectory *new g*	Rev. R. H. Simpson	8	0 6	180	..	(29·50)	219	138
D Spilsby	J. E. Bolt, Esq.	5	1 4	124	..	30·11	185	143
D Hagworthingham (Glebe House)	Mr. R. Wright	5	1 0	240	..	31·06	184	146
D Mablethorpe (Trusthorpe Hall)	I. N. Woodiwiss, Esq.	8	1 3	10	..	28·93	214	133
D Mablethorpe	The Surveyor	5	1 0	7	..	27·63	177	132
D Louth (Westgate)	Rev. W. E. Yates	5	0 9	120	28·0	30·57	204	134
D Binbrook (West House)	Mrs. C. Fieldsend	5	1 2	309	..	39·83	191	155
D Wold Newton Manor	W. Maurice Wright, Esq.	5	1 6	230	..	34·17	221	155
D Grainsby Hall	Mr. J. Butters	5	1 0	75	..	32·41	223	150
5.—HUMBER—Right Bank Tributaries. 428 sq. mi.								
D North Willingham House	Mrs. Charles Wright	5	3 0	125	..	36·34	244	173
D Brigg (Thornholme)	E. I. Brown, Esq.	5	1 5	22	..	30·76	186	130
D Brigg (Wrawby Road)	A. R. Haynes, Esq.	5	1 1	22	..	31·14	185	130
D Cleethorpes (Kings Parade)	Urban District Council	5	1 0	23	..	28·76	186	131
D Grimsby (Abbey Road)	W. J. Wood, Esq., C.E.	5	2 6	25	..	30·26	186	141
D Grimsby (Westlands)	Major G. L. Bennett	5	1 0	23	..	28·00	163	133
D Brocklesby Park	Mr. J. Chisholm	5	1 0	90	..	30·93	181	131
D Ulceby (Wootton Lodge)	Mr. F. W. Prentice	5	1 5	100	..	31·46	172	135
D Horkstow	E. J. Turton, Esq.	5	1 0	75	..	31·10	166	137
D Ferriby Sluice	F. Straw, Esq.	5	1 0	18	..	28·96	184	136
6.—TRENT—Right Bank Tributaries. 172 sq. mi.								
D Swinderby (Ling Moor)	C. H. Wray, Esq.	5	1 0	50	..	30·94	172	145
d Woolsthorpe	L. and N.E. Rly.	5	1 3	182	..	25·90	..	116
D Torksey	Miss M. Burtt	5	3 0	18	..	29·62	173	125
d Gate Burton Hall	The Hon. Mrs. Sandars	5	1 0	97	..	28·24	..	112
D Messingham School	W. E. Ramsden, Esq.	5	6 0	115	..	27·63	180	114
7.—TRENT—Left Bank Tributaries. 77 sq. mi.								
D Wroot (S. Level Pump Station)	Mr. A. J. Trafford	10	1 6	8	..	26·41	191	130
d Crowle (N. Level Pump Station)	Mr. H. G. Trafford	5	2 0	10	22·6	28·72	..	122
NOTTINGHAMSHIRE. (Area, 843 sq. mi.)								
1.—WITHAM. 10 sq. mi.								
2.—TRENT—Right Bank Tributaries. 218 sq. mi.								
D Sutton Bonnington Agric. Coll. (+A)	The Principal	5	1 0	158	21·7	31·59	170	130
D Plumtree (Normanton-on-Wolds)	late T. A. Hill, Esq.	8	2 0	170	24·0	33·01	196	131
D Ruddington (Westlands)	J. D. Walker, Esq.	5	1 0	100	24·3	32·15	184	129
D Nottingham (Wilford Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	295	23·1	33·02	201	137
D East Bridgford	G. W. Beaumont, Esq.	5	1 0	150	..	27·77	172	124
D Newark	J. H. Clarke, Esq., C.E.	5	0 9	43	23·4	28·97	195	126
3.—TRENT—Derwent. 2 sq. mi.								

† Gauge over sheltered.

DIVISION VII—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
NOTTINGHAMSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Erewash. 42 sq. mi.								
D Nottingham (Strelley)	late Major T. L. K. Edge	8	1 0	386	26·2	34·66	211	148
D Nottingham (Strelley Hall) *new*	late Major T. L. K. Edge	5	1 0	376	..	34·46	206	151
D Bulwell (Watnall Reservoir)	F. W. Davies, Esq., C.E.	8	1 0	468	29·0	38·53	183	149
D Eastwood Waterworks	F. W. Davies, Esq., C.E.	8	1 3	243	25·9	34·72	201	138
d Eastwood Hall	Messrs. Barber, Walker & Co., Ltd.	5	1 0	218	..	34·97	(187)	(144)
D Eastwood (Moorgreen Res.)	L. and N. E. Rly. Co.	5	2 0	301	27·4	36·33	207	146
D Annesley (Selston W.W.)	S. Maylan, Esq.	5	1 0	475	26·2	35·61	167	130
5.—TRENT—Left Bank Tributaries. 569 sq. mi.								
D Attenborough	R. F. T. Granger, Esq.	8	1 0	885	..	33·72	209	128
D Beeston (Council Depot)	E. A. Bush, Esq.	5	1 0	121	24·5	34·07	175	137
D Nottingham (Trent Lane) (+A.)	T. Wallis Gordon, Esq., C.E.	8	1 0	83	22·5	30·87	181	123
D Nottingham (The Castle)	T. Wallis Gordon, Esq., C.E.	8	1 0	192	23·6	30·77	184	124
D Nottingham (Colwick Hill Res.)	F. W. Davies, Esq.	8	1 0	314	..	29·84	181	123
D Nottingham (Burford Road)	A. B. Tinn, Esq.	5	1 0	170	25·3	34·45	196	133
D Nottingham (Stoke Bardolph)	T. Wallis Gordon, Esq., C.E.	8	1 0	66	22·6	29·21	188	129
D Nottingham (Mapperley Hill)	Dr. G. L. Brunton	8	1 0	400	24·9	31·95	202	136
D Bagthorpe (Isolation Hospital)	Dr. Cyril Banks	8	2 0	190	25·3	34·79	202	138
D Nottingham (Basford W.W.)	F. W. Davies, Esq., C.E.	8	1 0	168	24·3	33·46	181	133
D Burton Joyce Waterworks	F. W. Davies, Esq., C.E.	8	1 0	65	25·2	29·61	165	126
D Bulcote (Corporation Farm)	T. Wallis Gordon, Esq., C.E.	10	1 3	65	23·6	30·11	173	126
Lowdham (Chilwell Nurseries)	J. D. Pearson, Esq.	5	1 5	90	21·4	27·87	..	..
D Bulwell (Bestwood W.W.)	F. W. Davies, Esq., C.E.	8	1 0	312	25·7	31·97	183	129
D Daybrook (Red Hill Reservoir)	F. W. Davies, Esq., C.E.	8	1 0	404	26·8	34·03	202	136
D Daybrook (Ramsdale Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	504	28·1	35·47	209	142
D Bulwell Hall Park	T. Wallis Gordon, Esq., C.E.	8	1 0	252	27·3	34·13	171	139
D Papplewick (Waterworks)	F. W. Davies, Esq., C.E.	8	1 0	317	27·0	33·27	169	132
D Southwell (The Residence)	Vn. Acdn. W. J. Conybeare.	5	1 0	100	24·7	30·57	171	125
D Southwell (Elmfield)	Miss S. Gale	5	1 0	137	24·9	29·75	169	130
D Sutton-in-Ashfield (Rushley P.S.)	Messrs. G. & F. W. Hodson.	5	1 0	462	27·1	39·13	159	142
D Sutton-in-Ashfield (Sew. Woks.)	F. J. Grierson, Esq.	5	1 0	453	28·9	36·56	185	144
d Mansfield (Rainworth W.W.)	J. Gibson, Esq., C.E.	5	1 0	360	27·5	34·93	..	130
D Mansfield (Carr Bank)	Borough Surveyor	8	0 10	357	..	35·38	182	140
D Mansfield (West Bank)	W. Pickard, Esq.	8	1 0	405	27·6	36·81	220	141
D Mansfield (Debdale Hall)	Francis N. Ellis, Esq.	5	1 6	400	28·1	36·28	156	136
D Clipstone Waterworks	J. Gibson, Esq., C.E.	5	1 0	225	25·9	34·92	182	147
D Ollerton (Boughton W.W.)	F. W. Davies, Esq., C.E.	8	1 0	141	25·7	31·92	199	131
D Ollerton (Thoresby Gardens)	Mr. A. J. Simmons.	5	1 0	125	26·6	32·63	161	129
D Welbeck Abbey	Mr. Chas. Harris.	8	0 10	196	..	36·03	214	129
D Clumber Gardens	The Agent	5	1 0	164	..	32·60	184	139
D Elkesley Pumping Station	C. Horobin, Esq., C.E.	5	1 0	120	24·0	29·47	170	121
D Worksop (Osberton Gardens)	Mr. A. Nicholson	5	3 0	70	23·8	26·81	181	127
D Retford (Morton Hall)	W. H. Mason, Esq.	9	1 0	140	23·7	28·87	170	125
D Retford (Sewage Disposal Wks.)	R. E. Wilson, Esq.	5	1 0	74	..	29·78	197	130
D Retford (Babworth Hall)	Major J. A. C. Whitaker	5	1 0	98	22·9	27·22	161	119
D Worksop (Wigthorpe Hill)	R. C. P. Ramsden, Esq.	5	1 0	100	*24·1*	32·77	180	135
D Worksop (Hodsock Priory) (+A)	Miss E. Mellish	8	1 0	56	23·6	31·88	190	133
d Langold Council Sch.	The Headmaster	5	1 0	150	..	(32·10)	..	..
d Harworth Colliery	Messrs. Barber, Walker & Co.	5	1 0	120	..	(31·08)	..	..
D Scrooby	Mr. J. Mallender	5	1 0	40	23·1	31·70	195	131
D Bawtry Hall (The Gardens)	Mr. F. E. Hogbin	5	1 0	31	23·1	31·40	182	136
d Bawtry Council Sch.	J. Rushworth, Esq.	5	1 0	37	..	29·24	(194)	(137)
6.—OUSE—Don. 2 sq. mi.								
DERBYSHIRE. (Area, 1,029 sq. mi.).								
1.—MERSEY, UPPER. 93 sq. mi.								
D Glossop W.W. (Swineshaw)	Geo. Faulds, Esq., C.E.	12	1 0	733	..	55·34	228	187
2.—MERSEY—Weaver. 2 sq. mi.								
3.—TRENT—Right Bank Tributaries. 68 sq. mi.								
D Melbourne Vicarage	Rev. E. T. Harcombe	10	1 0	180	..	36·56	175	139
D Repton (The Croft)	H. C. Hayward, Esq.	5	1 2	170	..	34·05	200	141
D Stanton-by-Bridge W.W.	H. Raven, Esq., C.E.	8	1 2	144	..	36·10	201	142

DIVISION VII—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
DERBYSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Dove. 156 sq. mi.								
D Rodsley Pumping Station	Edwin Wright, Esq.	5	1 0	405	..	40·19	222	156
D Ashbourne Vicarage	Rev. Canon F. L. Shaw	5	1 6	500	..	42·43	210	160
5.—TRENT—Left Bank Tributaries. 84 sq. mi.								
d Etwall (Blakeley Lodge)	G. Edge Laban, Esq.	5	1 0	190	..	32·32	..	147
d Etwall (Sewage Farm)	Mr. B. Hydes	5	1 8	201	..	35·03	..	151
d Etwall Hall	Col. M. Dawson	5	1 3	235	..	36·08	(191)	(149)
D Mickleover (C. Mental Hospital)	G. V. Bartlett, Esq., M.D.	5	1 0	300	..	37·29	179	150
Littleover (The Knoll)	W. Blews Robotham, Esq.	5	1 0	300	..	35·45	204	153
D Littleover (Hilltop)	E. McInnes, Esq.	5	1 0	346	..	36·55	203	152
6.—TRENT—Derwent. 428 sq. mi.								
D Spondon (Derby Sewage Wks.)	E. H. Bennett, Esq., C.E.	5	1 3	135	..	37·00	195	148
D Spondon Hall	Sir H. Fowler, K.B.E., LL.D.	5	1 0	230	..	36·87	206	148
D Derby (Wild Street)	Messrs. J. Davis & Son, Ltd.	5	1 0	174	..	38·47	180	144
D Derby (L. M. & S. Railway)	A. F. Bound, Esq.	5	1 0	156	25·1	34·53	175	138
D Derby (Royal Infirmary)	W. Banks, Esq.	5	1 0	190	..	38·14	198	165
D Derby (The Arboretum)	E. H. Bennett, Esq., C.E.	8	1 0	196	..	36·74	189	150
Kirk Langley (Langley Hall)	G. W. Peach, Esq.	5	1 5	396	*28·9*	39·60	200	149
D Duffield (The Kirkstyles)	Messrs. J. Davis & Son, Ltd.	5	2 0	235	*27·5*	43·87	209	152
D Belper (Herbert Strutt School)	The Principal	5	0 8	222	*30·0*	41·23	207	148
D Belper (Quarry Bank)	J. Hunter, Esq., C.E.	5	0 10	280	29·7	38·74	191	153
d Ambergate Reservoir. No. 61	S. B. Winser, Esq., C.E.	5	1 0	700	..	35·52	..	..
D Whatstandwell (Meerbrk. Sough)	Messrs. G. & F. W. Hodson.	5	1 0	246	..	43·27	223	157
D Brackenfield (Lindway Res.)	R. F. Ward, Esq., C.E.	5	1 0	595	..	42·30	200	144
D Matlock Bath (Lower Tower)	Miss E. Chadwick	5	1 1	500	*35·9*	42·62	195	155
D Matlock (Rockside Hydro.)	J. H. Goodwin, Esq.	5	1 0	637	..	42·48	216	156
D Darley Dale (Whitworth Inst.)	E. Evans, Esq.	5	1 0	361	..	40·87	206	146
D Darley Dale (Stancliffe Hall) (R)	Maj. T. Bedford Franklin.	8	1 0	560	..	41·60	190	149
D Clay Cross (Press Reservoirs)	Gilbert Frith, Esq., C.E.	8	1 0	810	..	38·70	199	149
w Buxton (Hurdlow Top)	L. M. & S. Rly.	8	1 10	1267	..	50·94	..	..
D Chatsworth Gardens	Mr. J. G. Weston	5	1 0	436	34·7	37·96	199	143
D Baslow (Over End)	A. E. Payne, Esq.	5	1 0	500	..	37·87	210	146
D Buxton (Portobello Bar)	F. Langley, Esq., C.E.	8	1 0	1600	59·7	65·87	236	185
D Buxton (Stanley Moor)	F. Langley, Esq., C.E.	8	1 0	1340	*56·1*	63·83	235	185
D Buxton (Burbage Edge)	F. Langley, Esq., C.E.	8	1 0	1400	*56·8*	61·89	236	184
D Buxton (Devonshire Hospital)	Town Clerk	8	1 0	1007	48·4	52·58	224	183
D Buxton (Lightwood)	F. Langley, Esq., C.E.	8	0 11	1191	..	54·41	207	187
D Bamford (Engineer's Office) No. 60	S. B. Winser, Esq., C.E.	8	2 1	510	*38·6*	46·74	239	189
D Bamford Filters. No. 70A	S. B. Winser, Esq.; C.E.	8	1 0	656	*38·5*	48·29	241	182
w Froggatt Edge (Stoke Flat)	J. G. Bown, Esq.	5	1 0	960	..	44·73	..	..
D Holmesfield (Barbrook Res.)	Gilbert Frith, Esq., C.E.	8	1 0	1080	..	41·70	198	162
Burbage (Lower Burbage) (+A)	Sheffield Corporation W.W.	8	1 0	924	*38·5*	44·39	..	..
Burbage (Higger Lodge)	Sheffield Corporation W.W.	5	1 0	1225	*39·0*	44·42	..	..
d Hope (Cement Works)	Messrs. S. & T. Earle, Ltd.	5	1 2	580	..	(48·75)	(192)	(160)
D Hope (Killhill Bridge). No. 56	D. W. Chadwick, Esq.	5	1 0	500	..	51·24	216	180
d Bamford (Yorkshire Br. Weir) 59	S. B. Winser, Esq., C.E.	5	1 0	540	..	48·56	(224)	(173)
Bamford (Yorkshire Br. Weir) 59A	S. B. Winser, Esq., C.E.	5	1 0	540	..	51·56	..	..
D Derwent Vicarage. No. 67	S. B. Winser, Esq., C.E.	8	1 0	675	*44·6*	51·64	239	182
M Derwent (Lockerbrook Plant.) 68	S. B. Winser, Esq., C.E.	5	1 0	782	*48·5*	58·02	..	..
D Derwent Dam. No. 26	S. B. Winser, Esq., C.E.	8	1 0	790	*42·4*	54·98	243	182
M Woodland Dale (Woodlands, N.) 47	S. B. Winser, Esq., C.E.	5	1 0	1063	..	58·00	..	..
M Hayfield (Ashop Head). No. 43	S. B. Winser, Esq., C.E.	5	1 0	1650	*46·2*	53·10	..	..
M Derwent Dale (Shire Owlers) 69	S. B. Winser, Esq., C.E.	5	1 0	825	*42·7*	54·35	..	..
D Derwent Dale (Birchinlee) No. 23	S. B. Winser, Esq., C.E.	8	1 0	870	*49·9*	64·32	251	197
M Westend Bridge. No. 66	S. B. Winser, Esq., C.E.	5	1 0	878	*50·0*	65·30	..	..
M Lady Clough Moor. No. 41	S. B. Winser, Esq., C.E.	5	1 0	1720	*46·8*	55·60	..	..
M Lady Clough Moor. No. 41A	S. B. Winser, Esq., C.E.	5	1 0	1720	..	60·60	..	..
M Coldharbour Moor (Summit) 39	S. B. Winser, Esq., C.E.	5	1 0	1670	*47·5*	53·50	..	..
D Derwent Dale (Howden Dam) 17	S. B. Winser, Esq., C.E.	8	1 0	829	*47·9*	61·03	252	196
M Derwent Dale (Ridge Farm) 13A	S. B. Winser, Esq., C.E.	8	1 0	875	*42·0*	64·23	..	..
M Alport Moor (Glethering Cl.) 40	S. B. Winser, Esq., C.E.	5	1 0	1640	*46·7*	57·45	..	..
M Alport Moor (Glethering Cl.) 40A	S. B. Winser, Esq., C.E.	5	1 0	1640	..	62·07	..	..
M Westend Moor (Blacklow Cote) 15	S. B. Winser, Esq., C.E.	5	1 0	970	*51·5*	65·68	..	..

DIVISION VII—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
DERBYSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
6.—TRENT—(*con.*).								
M Westend Moor	No. 10. S. B. Winser, Esq., C.E.	5	1 0	1560	*47·1*	62·02	..	..
M Alport Moor	No. 38. S. B. Winser, Esq., C.E.	5	1 0	1790	*47·0*	60·40	..	..
M Alport Moor	No. 38A. S. B. Winser, Esq., C.E.	5	1 0	1790	..	64·50	..	..
M Derwent Dale (Slippery Stones)	62. S. B. Winser, Esq., C.E.	5	1 0	908	*49·3*	64·82	..	..
M Ridgewalk Moor	No. 9. S. B. Winser, Esq., C.E.	5	1 0	1650	*47·5*	61·58	..	..
M Broadhead Clough	No. 63. S. B. Winser, Esq., C.E.	5	1 0	1005	*53·3*	65·11	..	..
7.—TRENT—Erewash. 50 sq. mi.								
D Long Eaton (The Hall)	H. Raven, Esq., C.E.	8	0 10	105	..	32·27	187	135
d Ilkeston (New Stanton)	Stanton Ironworks Co., Ld..	5	1 6	150	..	41·61	(201)	(159)
D Heanor (Sharplow)	J. R. Groom, Esq.	5	1 0	240	..	38·00	207	145
D Codnor (Cross Hill)	A. F. Pine, Esq.	5	1 0	394	*27·5*	38·30	206	152
D Codnor Park	L. M. & S. Rly. Co.	5	1 0	243	*29·3*	36·97	223	150
8.—OUSE—Don. 148 sq. mi.								
D Chesterfield (Walton San.)	Dr. A. Niven Robertson....	5	1 0	450	..	35·28	180	134
D Chesterfield (Linacre Res.)	Chesterfield Water Board...	8	1 0	430	*33·4*	39·64	208	164
D Chesterfield (Linacre Res.)	Chesterfield Water Board...	5	1 0	475	*31·6*	38·19	208	162
D Chesterfield (Sewage Works)	S. Thornhill, Esq.	5	1 0	223	..	31·41	184	125
D Horsley Gate	Miss E. Wilson	5	1 0	650	..	41·38	201	162
D Totley Hall	W. A. Milner, Esq.	5	1 0	700	*37·3*	43·54	217	160
Burbage (Badger Ho.)	Sheffield Corporation W.W..	5	1 0	1138	*40·5*	45·97	..	..

DIVISION VIII—NORTH-WESTERN COUNTIES.

CHESHIRE. (Area, 1,027 sq. mi.).

1.—MERSEY, UPPER. 200 sq. mi.								
D Langley (Twelve Ashes)	E. Hansom, Esq., C.E.	6	0 9	903	..	49·48	211	186
D Langley (Trentabank Res.)	E. Hansom, Esq., C.E.	6	0 9	854	..	49·06	211	184
D Langley (Bottoms Res.)	E. Hamson, Esq., C.E.	5	1 3	664	38·5	45·22	212	180
D Macclesfield (Leadbeaters Res.)	E. Hamson, Esq., C.E.	5	1 0	608	33·1	39·40	221	167
D Macclesfield (West Park)	E. Hamson, Esq., C.E.	5	1 0	500	34·1	41·62	216	170
D Rainow (The Clough)	Miss Anna Neave	5	1 3	815	34·4	42·95	231	182
D Knutsford (Hazelfield)	H. P. Ashworth, Esq.	5	1 0	213	30·3	38·02	217	157
D Kettleshulme (Glebe House)	A. Y. Barker, Esq.	5	1 6	850	39·6	42·48?	224	176
d Whaley Bridge (Taxal Lo.)	Mrs. Ramsden-Jodrell.	5	1 0	700	..	(49·46)	(209)	(175)
D Whaley Bridge (Todds Brook)	Mr. F. Bowden	5	1 0	602	40·3	52·47	285	187
d Wilmslow	J. Wallis Muirhead, Esq.	5	1 2	270	..	36·40	..	..
D Disley (Lyme Park)	T. Molyneux, Esq., C.E.	5	1 0	674	..	42·00	198	162
D Disley (Lyme Park)	T. Molyneux, Esq., C.E.	5	1 0	720	..	40·02	198	162
D Runcorn (Weston Point)	Weaver Navigatn. Trustees.	8	1 4	17	31·3	37·39	197	164
D Moore (Uplands)	Lt.-Comm. G. K. Rylands, R.N..	5	1 0	120	..	36·77	215	165
d High Lane (Lyme View)	S. Arrowsmith, Esq.	5	1 0	602	..	39·81	..	..
D Thelwall (The Clough)	E. W. Reynolds, Esq.	5	1 0	95	31·4	37·62	191	155
Altrincham (Norman's Pl.)	*old g.* Miss G. A. Griffiths.	5	8 0	150	33·6	39·53	..	162
Altrincham (Burlington Cott.)	Miss Laura Newton	8	2 6	103	31·4	37·87	..	..
Cheadle (Adswood)	R. W. Wright, Esq.	5	1 0	186	..	37·04	..	..
D Stockport (Isolation Hospital)	N. Gebbie, Esq., M.D.	5	1 2	285	..	38·90	199	158
Godley Reservoir, *old g*	L. Holme Lewis, Esq., C.E..	5	2 0	500	31·8	40·14	..	..
D Broadbottom (Harewood Lodge)	Col. W. Sidebottom	5	1 0	440	34·6	44·99	188	175
D Dukinfield (Higher Reservoir)	M. T. B. Whitson, Esq., C.E.	8	1 6	495	..	40·76	213	174
D Dukinfield (Lower Reservoir)	M. T. B. Whitson, Esq., C.E.	5	1 0	435	33·0	42·19	212	176
Arnfield Reservoir, *old g.*	L. Holme Lewis, Esq., C.E..	5	2 0	512	39·1	49·56	..	..
Arnfield Reservoir, *new g*	L. Holme Lewis, Esq., C.E..	5	1 0	512	..	50·05	..	..
Rhodes Wood Reservoir, *old g*	L. Holme Lewis, Esq., C.E..	5	1 6	545	42·9	56·52	..	..
Torside Reservoir, *old g*	L. Holme Lewis, Esq., C.E..	5	2 0	669	44·0	54·47	..	..
Torside Reservoir, *new g*	L. Holme Lewis, Esq., C.E..	5	1 0	669	..	56·13	..	..
D Stalybridge (Market Ground Yd.)	M. T. B. Whitson, Esq., C.E.	5	1 0	373	..	43·30	200	173
D Stalybridge (Brushes Filter Ho.)	M. T. B. Whitson, Esq., C.E.	5	1 6	616	39·2	47·02	208	182
Swineshaw Moor (Lees Hill)	M. T. B. Whitson, Esq., C.E.	5	1 0	1168	38·6	45·21	..	..
Woodhead Reservoir, *new g*	L. Holme Lewis, Esq., C.E..	5	1 0	665	47·7	59·03	..	..
†Crowden (Span Gutter)	L. Holme Lewis, Esq., C.E..	5	1 0	1530	..	56·22	..	..
†Woodhead (Pikenaze)	L. Holme Lewis, Esq., C.E..	5	1 0	907	..	52·47	..	..

† Gauge over-exposed on Moor.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CHESHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—MERSEY, UPPER—(*con.*).								
‡ Ormes Moor	L. Holme Lewis, Esq., C.E..	5	1 0	1356	..	51·24	..	..
‡ Pikenaze Moor (Round Hill)	L. Holme Lewis, Esq., C.E..	5	1 0	1514	..	51·44	..	..
‡ Heyden Moor (Britland Edge)	L. Holme Lewis, Esq., C.E..	5	1 0	1540	..	63·11	..	..
‡ Upper Heyden	L. Holme Lewis, Esq., C.E..	5	1 0	1718	..	50·74	..	..
‡ Grains Moss	L. Holme Lewis, Esq., C.E..	5	1 0	1570	..	56·05	..	..
2.—MERSEY—Weaver. 489 sq. mi.								
d Wirswall Hall	F. H. Illingworth, Esq.	5	1 0	500	..	(34·91)	..	..
D Nantwich (Dorfold Hall)	Weaver Navigatn. Trustees	8	1 0	190	28·8	38·72	238	175
D Nantwich (Reaseheath Hall)	Weaver Navigatn. Trustees.	8	1 0	130	29·1	35·80	242	162
d Crewe (Weston Lane)	L. M. & S. Rly.	12	4 0	186	28·2	36·08	(202)	(146)
D Crewe (Isolation Hospital)	Leonard Reeves, Esq., C.E..	5	1 0	172	27·6	33·20?	195	140
D Sandbach (Malkin's Bank)	Messrs. Brunner, Mond & Co..	5	1 0	230	..	35·97	210	162
D Congleton (Sewage Works)	Borough Surveyor.	5	1 0	248	30·1	41·03	224	182
D Congleton (Buglawton Sch.) *new g.*	Weaver Navigation Trustees	8	1 0	347	..	37·70	226	173
D Congleton (Buglawton Vic.) *new g.*	Weaver Navigation Trustees	8	1 0	347	30·5	37·25	230	168
D Tarporley (Tirley Garth Gdns.)	Mr. J. B. Allan.	5	3 6	450	30·0	38·32	224	168
D Middlewich	Messrs. Brunner, Mond & Co.	5	1 0	138	..	34·53	199	169
d Middlewich (Bostock H.) *old g.*	Capt. W. H. France-Hayhurst	5	2 6	157	29·3	35·70	..	144
D Delamere (Linmere)	Office of Woods.	8	0 9	250	29·5	38·18	239	169
D Northwich (Sandiway, W.W.)	J. Birtwistle, Esq.	8	1 0	163	..	37·55	209	167
D Northwich (Hunts Lock)	Weaver Navigation Trustees	8	1 0	47	30·0	35·25	231	153
D Northwich (Winnington)	Messrs. Brunner, Mond & Co.	5	1 0	64	28·9	35·34	222	160
D Northwich (Barnton)	Giles Owen, Esq.	5	1 0	175	30·3	33·18	216	164
D Northwich (Lostock Gralam)	Messrs. Brunner, Mond & Co.	5	1 0	75	..	35·65	251	158
3.—MERSEY LOWER & C. 142 sq. mi.								
Tarporley (Willington Hall)	Major C. W. Tomkinson.	5	1 0	220	..	37·81	..	162
D Mouldsworth	A. J. Robinson, Esq.	5	1 0	345	..	35·22?	177	148
D Ince Hall	Mrs. Park-Yates.	5	1 0	95	..	38·94	204	159
D Hooton Waterworks	A. J. Robinson, Esq.	5	1 6	97	30·3	39·63	200	162
d Eastham	H. B. Vernon, Esq.	5	1 0	100	31·9	36·05	195	151
D Crosshill Reservoir, *old g*	R. F. Baker, Esq.	5	1 0	237	..	37·92	214	153
D Crosshill Reservoir, *new g*	R. F. Baker, Esq.	5	1 0	212	..	38·06	214	150
D Prenton Waterworks	A. J. Robinson, Esq.	5	1 6	91	28·1	45·20	177	164
D Rock Ferry (Elmhurst)	Miss C. J. Shepherd.	8	6 0	100	30·8	40·70	197	155
D Rock Ferry (High School)	L. Davies-Shiel, Esq.	5	1 0	100	..	37·39	206	159
D Birkenhead (Oxton)	J. H. Howell, Esq.	5	1 1	163	..	39·40	194	165
D Birkenhead (Bidston Obs'y.) (+A)	The Director.	8	1 0	198	27·9	36·50	215	151
D Hoylake (Recreation Gd.)	W. H. Maitland, Esq.	5	1 0	29	28·1	36·87	207	164
D Wallasey (Harrison Park)	Dr. T. W. N. Barlow.	5	1 0	66	..	39·45	201	162
4.—DEE. 127 sq. mi.								
D Eaton Hall Gardens	Mr. N. F. Barnes	5	1 0	72	26·9	41·77	219	173
D Eccleston	E. Wells, Esq.	5	1 1	94	26·8	35·64	207	152
D Rowton (Holly Bank)	J. H. Salmon, Esq.	5	1 5	123	29·4	38·94	186	151
D Chester (Sewage Disposal Wks.)	C. Greenwood, Esq., C.E..	5	1 0	33	26·1	38·07	171	148
D Chester (Waterworks)	C. Wilfrid Bennett, Esq.	5	0 10	85	26·4	35·34	199	141
D Neston (Vine House)	H. F. Russell, Esq.	5	1 0	111	27·4	36·11	198	147
D Heswall (St. Fillan's)	Capt. J. Deedes.	5	1 0	40	..	36·30	194	151
w Heswall (Greta)	Dr. T. Guthrie.	5	1 0	230	..	38·57	..	..
D West Kirby (Caldy Manor)	Mr. E. L. Barker.	5	6 0	131	27·9	37·89	190	143
West Kirby (Hilbre House)	Egerton Macdona, Esq.	5	0 9	25	27·8	38·80	..	..
D West Kirby (Monk's Way)†	Miss G. S. Kirkby.	5	1 0	113	28·9	38·12	203	154
D West Kirby (St. Andrew's Vic.)	Rev. E. F. Robson.	5	1 0	25	27·9	37·98	201	155
D West Kirby (Deeside Nursery)	H. Ward, Esq.	5	1 6	45	..	38·70	202	150
SOUTH LANCASHIRE. (Area, 687 sq. mi.).								
1.—ALT & C. 103 sq. mi.								
D Litherland (Hatton Hill Pk.)	G. W. Ponsford, Esq., C.E...	5	1 0	59	..	39·34	180	144
d Ormskirk (Bickerstaffe P. Stn.)	C. Burton Ede, Esq., C.E...	5	1 2	128	31·4	43·19	..	..
d Ormskirk (Springfield P. Stn.)	C. Burton Ede, Esq., C.E...	5	0 11	70	..	41·92	..	..
D Formby (The Dunes)	J. Harold Coney, Esq.	5	0 9	30	..	40·71	205	180
D Garston, *new g.*	Liverpool Corporation.	5	1 0	81	..	39·40	211	164
D Garston (Grassendale Park)	Miss E. C. Abraham.	5	1 0	35	30·1	40·08	214	169
D Aigburth (Beech Lawn)	T. H. Edwards, Esq.	8	1 0	120	*31·7*	39·20	209	153

† Previously called Princes Avenue.

‡ Gauge over-exposed on Moor.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	SOUTH LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—MERSEY, LOWER. 240 sq. mi.								
D	Liverpool (Lark Lane)	Liverpool Corporation	5	10 8	90	..	39·18	197	161
D	Liverpool (Smithdown Road)	Liverpool Corporation	5	1 0	135	*32·8*	40·34	200	174
D	Liverpool (Monument Pl.)..(+A)	Liverpool Corporation	5	1 3	124	..	42·14	196	155
D	Liverpool (Rathbone Road)	Liverpool Corporation	5	1 0	198	*35·0*	43·59	195	172
D	Liverpool (Breckside Park)†	Liverpool Corporation	5	1 0	132	..	40·91	193	165
D	Liverpool (Queens Drive)	Liverpool Corporation	5	1 0	119	*34·9*	40·66	204	169
D	Warrington (Howley Yard)	A. M. Ker, Esq.	10	5 1	26	..	36·46	190	155
D	Irlam (Sewage Works)	The Engineer	5	1 1	40	..	40·09	202	168
D	St. Helen's (Eccleston Hill)	A. P. Statham, Esq., C.E.	12	1 0	265	*33·8*	42·65	220	168
D	St. Helen's (Victoria Park)	Dr. F. Hauxwell	8	1 5	160	..	42·05	236	177
d	Earlestown (Newton Cemetery)	T. E. Clough, Esq.	5	1 0	75	*32·5*	39·09	..	..
D	Leigh (Sewage Works)..(+A)	D. Ledson, Esq.	5	1 0	67	..	40·57	215	168
D	Leigh (Leesrigg)	Maj. T. Hunter, V.D., C.E.	5	1 0	71	..	45·31	189	171
	3.—MERSEY,—Irwell. 299 sq. mi.								
D	Stretford (Sewage Farm)	Stretford U.D.C.	5	1 1	65	..	(37·12)	166	150
D	Stretford (Longford Yard)	Stretford U.D.C.	8	1 1	87	..	39·40	199	161
D	Manchester (Hullard Park)	Stretford U.D.C.	8	1 1	100	..	41·10	195	172
D	Manchester (Old Trafford)	Stretford U.D.C.	8	1 1	107	..	39·00	213	169
D	Urmston (Sew. Wks., Davyhulme)	G. F. Walter, Esq.	8	1 0	72	*31·4*	38·91	185	169
D	Patricroft (Eccles Sewage Wks.)	C. J. Girling, Esq.	5	1 0	72	..	38·00	208	170
D	Manchester (Godlee Observ'y.)	W. C. Jenkins, Esq.	8	1 6	140	*33·0*	36·75	201	158
D	Manchester (Oldham Road)	Dr. R. Veitch Clark	5	1 0	191	34·3	38·89	203	167
D	Manchester (Whitworth Park)	Manchester University	8	1 5	125	31·7	38·62	199	165
D	Ashton-und.-Lyne (Knott H. Res.)	M. T. B. Whitson, Esq., C.E.	6	1 0	605	*37·1*	48·11	209	187
D	Swinton (Victoria Park)	The Medical Officer of Health	6	1 0	253	..	38·92	196	167
D	Clifton Power Station	L. M. & S. Rly.	5	1 6	124	..	41·39	190	166
D	Prestwich Sewage Works	H. T. Ainsworth, Esq., C.E.	8	0 10	150	..	41·48	219	176
	Prestwich Reservoir, *old g*	L. Holme Lewis, Esq., C.E.	5	2 0	357	*34·9*	37·30	..	..
D	Prestwich (Heaton Park)	Manchester Corporation	8	1 0	312	..	43·56	208	173
	Prestwich (Heaton Park Res.)	L. Holme Lewis, Esq., C.E.	5	1 0	355	..	45·65	..	..
D	Oldham Gas Works	Ernest Parry, Esq., C.E.	5	5 0	602	*37·9*	50·07	235	185
D	Oldham (Brushes Clough) No. 3	C. J. Batley, Esq., C.E.	5	1 0	921	..	57·54	230	190
D	Royton (Public Park)	J. Pattison, Esq., C.E.	5	1 0	502	..	45·85	217	179
D	Bolton (Queen's Park)..(+A)	T. Midgley, Esq.	5	1 0	342	*43·7*	52·08	225	179
d	Bolton (L.M.S.R.)..No. 1	L. M. & S. Rly.	5	1 0	299	..	51·75	..	..
D	Bolton (Heaton Reservoir)	Bolton Corporation W.W.	5	1 0	500	*43·4*	53·27	226	180
	Bolton W.W. (Harpers Farm)	Bolton Corporation W.W.	5	1 0	872	..	55·26	..	..
D	Bolton (Bloomfield, Heaton)	Mrs. F. Taylor, J.P.	5	1 0	530	..	53·10	221	179
D	Bolton (Smithills Hall)	Nigel V. Ainsworth, Esq.	8	1 2	510	46·1	55·72	252	182
D	Horwich (Loco. Works)	L. M. & S. Rly.	5	1 0	400	..	56·29	254	186
D	Bury (L.M.S.R.)..No. 5	L. M. & S. Rly.	5	1 0	294	..	46·90	236	181
D	Bury (Parsons Lane)	Bury Water Board	8	9 8	316	..	50·47	219	182
D	Bury (Bridge Hall)	Miss C. Wrigley	8	1 6	..	..	48·96	210	174
D	Bradshaw (Sewage Works)	Turton U.D.C.	5	1 0	329	..	54·98	219	192
D	New Hey (Sewage Works)	Mr. J. B. Ogden	5	1 0	514	*41·4*	50·53	221	172
D	Milnrow (Butterworth Hall)	C. J. Batley, Esq., C.E.	5	1 0	512	*43·6*	54·18	241	190
D	Milnrow (Piethorne, Kitcliffe)	C. J. Batley, Esq., C.E.	5	1 0	766	..	58·94	238	193
D	Milnrow (Piethorne, Coldgreave)	C. J. Batley, Esq., C.E.	5	1 0	832	*40·9*	58·95	238	188
D	Rochdale (Roch Mills Sew. Wks.)	S. H. Morgan, Esq., C.E.	8	1 1	363	..	51·93	225	179
D	Rochdale (Broadfield Pk. Obsy.)	Medical Officer of Health	8	1 0	472	43·9	50·12	225	181
D	Rochdale (Fieldhead Yard)	S. H. Morgan, Esq., C.E.	8	1 0	473	..	51·79	212	186
D	Rochdale (Ashworth Moor Res.)	Heywood Water Board	5	1 2	956	..	52·11	225	188
	Bolton (Egerton House) *old g*	E. H. Ashworth, Esq.	5	1 0	633	49·0	57·35	..	..
	Bolton (Egerton House) *new g*	E. H. Ashworth, Esq.	5	1 0	633	48·6	57·53	..	..
D	Bury (Gin Hall)..No. 1	Bury Water Board	8	1 0	475	43·7	52·07	216	179
D	Bury (Gin Hall)..No. 2	Bury Water Board	8	1 0	475	44·0	53·56	216	179
D	Bolton W.W. (Springs Reservoir)	Bolton Corporation W.W.	5	1 0	800	56·6	62·29	235	183
	Bolton W.W. (Springs)..No. 2	Bolton Corporation W.W.	5	1 0	810	..	64·24	..	..
‡	Bolton W.W. (Eagley)..No. 1	Bolton Corporation W.W.	5	1 0	605	..	54·83	..	..
*	Bolton W.W. (Eagley)..No. 2	Bolton Corporation W.W.	5	1 0	605	..	56·48	..	..
	Bolton W.W. (Eagley)..No. 4	Bolton Corporation W.W.	5	1 0	546	..	60·90	..	..
M	Bolton W.W. (Hordern)	Bolton Corporation W.W.	5	1 0	1160	52·5	65·49	..	..
*	Bolton W.W. (Delph)	Bolton Corporation W.W.	5	1 0	710	..	61·41	..	..
M	Bolton W.W. (Longworth)	Bolton Corporation W.W.	5	1 0	770	51·8	63·35	..	..

† Newsham Park until 1st November, 1929. ‡ Gauge over-exposed on Moor. * Turf wall round gauge.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SOUTH LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—MERSEY—Irwell.—(*con.*).								
‡ Bolton W.W. (Wayoh).....	No. 2. Bolton Corporation W.W...	5	1 0	612	..	60·92	..	..
Bolton W.W. (Wayoh).....	No. 3. Bolton Corporation W.W...	5	1 0	608	..	61·44	..	..
* Bolton W.W. (Holden's Farm)....	Bolton Corporation W.W...	5	1 0	955	..	64·05	..	..
Bolton W.W. (Top-o'-th'-Brow)...	Bolton Corporation W.W...	5	1 0	935	..	67·93	..	..
D Bolton W.W. (Entwistle).....	Bolton Corporation W.W...	5	1 0	700	51·9	63·36	250	191
Bolton W.W. (Entwistle)...	No. 2. Bolton Corporation W.W...	5	1 0	692	..	63·63	..	..
Bolton W.W. (Bromiley Heys)....	Bolton Corporation W.W...	5	1 0	925	..	69·02	..	..
* Bolton W.W. (Hulton Pasture)....	Bolton Corporation W.W...	5	1 0	1130	..	62·02	..	..
* Bolton W.W. (Moorside).....	Bolton Corporation W.W...	5	1 0	850	..	59·84	..	..
Bolton W.W. (Clough).....	No. 2. Bolton Corporation W.W...	5	1 0	1025	..	66·48	..	..
‡ Bolton W.W. (Cranberry Moss)....	Bolton Corporation W.W...	5	1 0	987	..	62·52	..	..
Bolton W.W. (Cranberry Moss)..	2. Bolton Corporation W.W...	5	1 0	982	..	63·81	..	..
M Bolton W.W. (Slater Lane).....	Bolton Corporation W.W...	5	1 0	985	51·3	64·87	..	..
Bolton W.W. (Brown Lowe).....	Bolton Corporation W.W...	5	1 0	1200	..	65·16	..	..
Bolton W.W. (Longshoot).....	Bolton Corporation W.W...	5	1 0	930	..	61·30	..	..
‡ Bolton W.W. (Uglow).....	Bolton Corporation W.W...	5	1 0	1150	..	54·76	..	..
Bolton W.W. (Uglow).....	No. 2. Bolton Corporation W.W...	5	1 0	1090	..	60·31	..	..
D Rochdale (Hamer Pasture Res.)...	Rochdale Corporation W.W.	5	1 0	760	..	58·02	225	192
D Rochdale (Naden Filters).....	Heywood Water Board.....	5	1 0	761	..	57·20	220	195
M Norden (Higher Red Lumb).....	Heywood Water Board.....	5	1 3	1125	43·0	52·87	..	..
W Norden (Far Knowl Farm).....	Heywood Water Board.....	5	0 10	..	45·7	57·13	..	..
W Rochdale (Naden Dean) *old g*.....	Heywood Water Board.....	5	1 4	948	..	50·53	..	..
W Rochdale (Naden Dean) *new g*.....	Heywood Water Board.....	5	1 4	948	..	53·19	..	..
D Littleborough (Longden End).....	C. J. Batley, Esq., C.E.....	5	1 0	751	..	59·49	233	184
D Littleborough (Hollngwrth Lke)...	C. J. Batley, Esq., C.E.....	8	1 0	610	..	51·90	221	180
D Littleborough (Broadhead).....	C. J. Batley, Esq., C.E.....	8	1 0	1337	..	55·15	240	187
D Littleborough (Blckstne. Edge)....	C. J. Batley, Esq., C.E.....	8	1 0	1268	..	57·28	245	189
D Littleborough (Uppr. Chlburn.)....	C. J. Batley, Esq., C.E.....	8	1 0	725	..	59·04	245	191
D Littleborough (Chelburn).....	C. J. Batley, Esq., C.E.....	8	1 0	700	*40·0*	50·40	245	183
M Ramsbottom (Killgate Brook).....	Heywood Water Board.....	5	1 0	978	45·6	56·06	..	..
d Ramsbottom (L.M.S.R.)....	No. 3. L. M. & S. Rly.....	5	0 11	418	..	56·47	..	..
M Ramsbottom (Cheesden Barn).....	Heywood Water Board.....	5	1 0	997	43·8	54·04	..	..
D Edenfield (Scout Moor Res.)	No. 1. Bury Water Board.....	8	1 0	1275	37·4	61·42	243	187
D Edenfield (Scout Moor Res.)	No. 2. Bury Water Board.....	8	1 0	1275	42·0	62·63	243	191
D Waterfoot (Cragg Reservoir).....	F. W. Mozley, Esq., C.E....	5	1 0	1325	47·2	57·14	257	195
D Waterfoot (Cowpe Reservoir).....	F. W. Mozley, Esq., C.E....	5	1 0	1013	47·1	57·45	259	194
D Rochdale (Spring Mill Whitworth).	Rochdale Corporation W.W.	5	1 0	720	51·4	60·53	218	200
D Wardle (Watergrove Mill).....	Rochdale Corporation W.W.	5	1 0	775	..	61·45	228	199
D Rochdale (Cowm, Whitworth).....	Rochdale Corporation W.W.	5	1 0	762	51·1	65·55	232	214
D Helmshore (Clough House).....	A. C. Cullen, Esq.....	5	1 0	650	48·1	63·23	223	182
D Haslingden (Holden Wood)	No. 1. Bury Water Board.....	8	1 0	670	*54·6*	63·18	217	199
D Haslingden (Holden Wood)	No. 2. Bury Water Board.....	8	1 0	670	46·1	59·63	216	197
D Haslingden (Calf Hey).....	No. 1. Bury Water Board.....	8	1 0	800	*51·9*	64·15	216	185
D Haslingden (Calf Hey).....	No. 2. Bury Water Board.....	8	1 0	800	50·5	57·41	216	183
D Bacup (Sheephouse Reservoir) ...	F. W. Mozley, Esq., C.E. ..	5	1 0	1008	34·0	48·98	251	175
D Bacup (L.M.S.R.).....	No. 4. L. M. & S. Rly.....	5	1 0	875	..	64·58	262	209
d Rawtenstall Cemetery	J. Johnson, Esq.....	8	1 1	572	49·8	57·22	..	176
d Haslingden (L.M.S.R.).....	No. 2. L. M. & S. Rly.....	5	1 0	715	..	61·74	..	..
D Rawtenstall (Cloughbottom)	No. 1. Bury Water Board.....	8	1 0	1025	46·3	63·13	227	203
D Rawtenstall (Cloughbottom)	No. 2. Bury Water Board.....	8	1 0	1025	42·9	61·28	227	200
D Rawtenstall (Hapton Res.)..	No. 1. Bury Water Board.....	8	1 0	930	46·9	61·71	228	205
D Rawtenstall (Hapton Res.)..	No. 2. Bury Water Board.....	8	1 0	930	49·6	65·81	228	205
4.—MERSEY, UPPER. 45 sq. mi.								
D Didsbury (Linden Road).....	L. G. King, Esq.....	8	1 6	110	*32·0*	39·06	213	165
D West Didsbury (Town Hall)..	(R).. Manchester Corporation....	8	7 6	121	..	35·93	185	153
D Stockport (Heaton Mersey).....	Miss Leigh.....	5	1 0	220	*30·3*	36·41	204	184
D Chorlton-cum-Hardy Sew. Works..	G. F. Walter, Esq.....	8	4 6	95	*31·0*	36·31	198	161
D Fallowfield (Platt Field Park).....	Manchester Corporation....	8	1 0	124	..	37·80	201	162
Denton Reservoir, *old g*	L. Holme Lewis, Esq., C.E..	5	2 0	306	30·5	36·91	..	..
Gorton Reservoir, *old g*	L. Holme Lewis, Esq., C.E..	5	2 0	263	*32·0*	37·35	..	..
D Ashton-u-Lyne (Henrietta St. Yd.).	M. T. B. Whitson, Esq., C.E.	7	1 0	394	..	45·37	207	180
D Lower Swineshaw Reservoir.....	M. T. B. Whitson, Esq., C.E.	8	1 6	886	*44·7*	51·69	213	192
Swineshaw Moor.....	M. T. B. Whitson, Esq., C.E.	5	1 0	1340	..	56·31	..	..
D Mossley (Manor House Yard).....	M. T. B. Whitson, Esq., C.E.	5	1 0	636	..	49·25	201	181

‡ Gauge over-exposed on Moor. * Turf wall round gauge.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	CENTRAL LANCASHIRE. (Area, 536 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—RIBBLE & C. 326 sq. mi.								
d	Darwen (Spring Bank)	T. Anderton, Esq.	5	1 0	710	..	61·60	(238)	(189)
D	Darwen (Ashleigh Street)	A. Barker, Esq	5	..	690	..	68·79	181	168
D	Darwen (Sunnyhurst Hey Res.)	E. Marsden, Esq., C.E.	8	1 0	915	43·5	58·56	235	193
D	Darwen (Earnsdale Reservoir)	E. Marsden, Esq., C.E.	8	1 0	705	47·0	62·69	236	188
D	Darwen (Bold Venture Park)	Dr. J. Robertson	8	1 1	724	50·4	62·34	238	189
D	Darwen (Hoddlesden) No. 1.	H. M. Webb, Esq., C.E.	8	1 6	680	48·6	60·42	222	185
D	Darwen (Daisy Green) No. 1.	H. M. Webb, Esq., C.E.	8	1 6	969	46·4	55·77	223	187
D	Darwen (Pickup Bank) No. 1.	H. M. Webb, Esq., C.E.	8	1 6	720	46·8	52·57	224	179
D	Brindle (Whiteholme)	Mrs. Victor H. Gatty	5	1 8	315	34·4	46·30	197	181
D	Haslingden (Mitchells Ho. Res.)	A. J. Harrison, Esq.	5	1 6	990	44·7	46·13?	223	176
D	Blackburn (Guide Reservoir)	H. M. Webb, Esq., C.E.	8	1 6	610	*39·6*	55·37	229	183
D	Blackburn (Witton)	H. M. Webb, Esq., C.E.	8	1 6	315	..	48·96	212	173
D	Blackburn Fever Hospital	H. M. Webb, Esq., C.E.	6	1 6	570	..	49·73	239	179
D	Hutton (Lancs. C.C. Hortic. Stat.)	The Director of Education	5	1 0	82	*35·4*	40·36	208	163
D	St. Anne's-on-Sea (South Side)	Dr. J. P. Litt	5	1 0	25	*32·8*	37·96	210	155
D	Accrington (Milnshaw Park)	Mr. J. W. Terry	5	1 6	464	39·4	50·84	208	174
*D	Preston (Moor Park) (+A)	Preston Corporation	8	1 0	110	35·3	44·04	228	168
D	Samlesbury Sewage Works	H. M. Webb, Esq., C.E.	8	1 6	240	*40·4*	43·34	199	161
w	Causeway Side (Burnley W.W.)	S. Rawlinson, Esq., C.E.	8	1 0	1116	..	53·12	..	..
w	Sheddin (Burnley W.W.)	S. Rawlinson, Esq., C.E.	8	1 0	960	*43·3*	54·58	..	..
D	Cant Clough S. Side (Burnley W.W.)	S. Rawlinson, Esq., C.E.	8	1 0	900	43·8	54·26	233	192
D	Cant Clough N. Side (Burnley W.W.)	S. Rawlinson, Esq., C.E.	8	1 0	900	*41·6*	55·58	244	183
w	Rams Clough Head (Burnley WW)	S. Rawlinson, Esq., C.E.	8	1 0	1260	*42·3*	50·15	..	..
D	Huncoat (Burnley Road Res.)	A. J. Harrison, Esq.	9	1 6	620	43·0	56·33	212	175
D	Wilpshire (Brooklyn Road)	H. W. Apperley, Esq	5	1 0	408	..	49·58	215	175
D	Great Harwood (Parsonage Res.)	H. M. Webb, Esq., C.E.	8	1 0	631	..	54·43	222	175
D	Great Harwood (Dean Clough)	A. J. Harrison, Esq.	12	1 6	540	..	52·16	219	184
D	Burnley (Queen's Park)	Dr. T. Holt	8	1 0	458	..	52·00	230	179
D	Burnley (Swinden) *Upper g.*	S. Rawlinson, Esq., C.E.	8	12 0	820	..	58·12	238	197
D	Burnley (Swinden) *Lower g.*	S. Rawlinson, Esq., C.E.	8	1 0	745	44·3	58·38	238	200
D	Padiham (Altham Sew. Works) (+A)	H. Russell, Esq., C.E.	5	1 0	225	..	50·30	221	176
D	Padiham (Gawthorpe Hall)	Lord Shuttleworth	8	0 9	316	*43·2*	(51·59)	230	189
D	Padiham (Huntroyde)	E. G. Howsin, Esq.	5	1 0	423	..	51·69	223	176
D	Alston Reservoir	E. C. Oakes, Esq., C.E.	8	1 2	320	41·0	45·81	223	173
	Nelson (Red Spa Moor)	Nelson Corporation W.W.	5	1 0	1285	..	46·78	..	..
D	Nelson (Coldwell Res.) S. No. 2.	Nelson Corporation W.W.	5	1 0	960	..	60·59	260	207
d	Nelson (Victoria Park)	Nelson Corporation W.W.	5	1 0	375	..	(50·96)	..	..
D	Nelson (Walton Lane) (+A)	J. W. Ingham, Esq.	5	1 0	540	..	52·48	220	177
d	Ribchester (Dutton)	L. C. King-Wilkinson, Esq.	5	1 6	400	..	(46·46)	..	..
D	Stonyhurst College (+A)	Rev. E. D. O'Connor	8	1 10	377	46·5	52·18	222	176
M	Knowle Green (Preston W. W.)	E. C. Oakes, Esq., C.E.	8	1 2	360	*40·9*	52·15	..	..
D	Spade Mill (Preston W.W.)	E. C. Oakes, Esq., C.E.	8	1 2	400	*41·6*	46·70	223	174
M	Jeffery Hill (Preston W. W.)	E. C. Oakes, Esq., C.E.	8	1 2	900	*47·2*	61·50	..	..
D	Sabden (Whins House)	Miss Foster	5	1 0	500	..	51·45	219	179
D	Sabden (Churn Clough Res.)	H. Russell, Esq., C.E.	5	1 0	790	..	54·32	242	189
w	Sabden (Craggs Dole)	H. Russell, Esq., C.E.	8	1 0	1050	..	53·11	..	..
w	Newchurch (Cock Dole)	H. Russell, Esq., C.E.	5	1 0	1090	..	55·91	..	..
D	Barley (Ogden Reservoir)	Nelson Corporation W.W.	5	1 6	950	..	59·51	217	177
D	Colne (Swinden Sew. Works)	T. H. Hartley, Esq.	5	1 0	423	..	52·29	228	176
	Barrowford Reservoir	Leeds & Liverpool Canal Co.	8	1 0	473	..	48·64	..	..
	Foulridge (Upper Reservoir)	Leeds & Liverpool Canal Co.	8	1 0	582	..	49·36	..	..
	Foulridge (Reedy Moor)	Leeds & Liverpool Canal Co.	5	1 0	553	..	46·81	..	..
D	Chatburn School	E. P. Aldersley, Esq.	5	0 11	322	..	52·14	230	179
D	Chatburn (Fir Tree House)	C. W. Wheeler, Esq.	5	1 0	385	..	50·83	214	171
	Clitheroe (Downham Hall)	R. C. Assheton, Esq.	10	1 6	464	41·5	49·09	..	..
	2.—RIBBLE—Douglas. 156 sq. mi.								
D	Wigan WW (Billinge Higher End)	W. F. Gardner, Esq., C.E.	5	1 0	374	33·9	48·60	206	177
D	Orrell (Upholland Gram. Sch.)	C. H. Cox, Esq.	5	1 0	320	35·5	47·69	240	176

* Gauge moved to Moor Park from Corporation Offices in April, 1930.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CENTRAL LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—RIBBLE—Douglas—(*con.*).								
D Wigan W. W. (Worthington)	W. F. Gardner, Esq., C.E...	5	1 0	225	35·4	44·03	217	171
D Horwich (Lower Rivington)	Col. J. R. Davidson, C.E....	5	1 0	440	38·7	44·31	237	172
w Horwich (Lower Knoll)	Col. J. R. Davidson, C.E....	8	1 4	742	41·2	47·36	..	..
w†Rivington (Brown Hill)	Col. J. R. Davidson, C.E....	8	1 4	843	40·1	53·07	..	..
D Rivington (Stoneshouse)..No. 1	Col. J. R. Davidson, C.E....	8	1 4	623	41·5	52·37	219	175
w Rivington (Stoneshouse)..No. 2	Col. J. R. Davidson, C.E....	8	1 4	623	41·1	50·53	..	..
D Chorley (Oakdene)	Dr. H. E. Middlebrooke....	5	1 0	283	..	45·52	216	176
w†Rivington (Hurst Hill)	Col. J. R. Davidson, C.E....	8	1 10	1029	42.2	60·18	..	..
w†Rivington (Great Hill)	Col. J. R. Davidson, C.E....	8	1 8	1240	47·6	62·48	..	..
w†Rivington (Coppice Stile)	Col. J. R. Davidson, C.E....	8	1 8	879	40·1	49·97	..	..
w Rivington (Gamekeeper's)	Col. J. R. Davidson, C.E....	8	0 8	850	45·4	55·88	..	..
D Chorley (Com. Bk. Sew. Wks.)	J. Slater, Esq.	5	1 0	179	..	41·66	211	168
D Leyland (Worden Hall)....(+A)	H. Nowell ffarington, Esq...	5	1 0	125	34·9	43·08	209	166
w†Darwen (Higher Hill)	Col. J. R. Davidson, C.E....	8	1 4	733	36·8	50·49	..	..
D Bamber Bridge (Cuerden Hall)	J. Alleyne Robinson, Esq...	5	1 0	230	35·7	40·02	202	165
3.—COAST STREAMS. 52 sq. mi.								
w Birkdale (Kent Rd.)	J. Baxendell, Esq.	5	1 0	26	*32·6*	39·93	..	..
d Southport (Portland St.)	C. Burton Ede, Esq., C.E....		.. ..	..	..	38·75	..	..
D Southport (Hesketh Park) (+A)	J. Baxendell, Esq.	8	1 0	37	32·0	39·57	219	171
4.—OUSE—Aire. 2 sq. mi.								
d Watersheddles Reservoir	A. Atkinson, Esq., C.E....	5	1 0	1115	..	62·62	(239)	(203)
Foulridge (Canal Office)	Leeds & Liverpool Canal Co.	8	1 0	497	..	47·29	..	..
NORTH LANCASHIRE. (Area, 609 sq. mi.)								
1.—DUDDON & C. 77 sq. mi.								
D Barrow-in-Furness (Gas Works)	Claude Diamond, Esq....	11	3 0	17	37·6	48·40	193	161
D Barrow-in-Furness (Sewage Wks.)	W. C. Persey, Esq., C.E....	5	1 0	20	..	42·14	219	160
D Little Urswick (North View)	J. Dobson, Esq.	5	1 6	130	*45·4*	50·43	201	161
D Askam (Senr. Council School)	The Headmaster.	5	1 0	37	..	51·72	202	153
D Ulverston (Poaka Beck)	Claude Diamond, Esq....	11	1 6	512	52·1	58·39	222	185
D Ulpha	Claude Diamond, Esq.	11	1 6	251	..	66·64	244	195
d Duddon Valley (Seathwaite Sch.)	Miss Kay.	5	1 0	348	..	81·63	..	..
w Duddon Val. (Seathwaite Tarn)	Claude Diamond, Esq....	11	1 6	1221	..	104·12	..	..
2.—LEVEN & C. 135 sq. mi.								
D Cartmel (Holker Hall)	Lord Richard Cavendish...	5	0 9	85	44·5	49·05	209	169
D Ulverston (Pengwerne)	C. J. Chapman, Esq.	5	1 4	138	..	52·50	213	170
Rusland Hall	C. F. Archibald, Esq.	5	1 0	25	44·7	59·32	225	188
Cartmell Fell (Ghyll Head Res.)	J. Lupton, Esq.	8	1 0	425	..	69·58	..	..
d Coniston (School Garden)	L. Grace, Esq.	5	1 0	180	..	75·81	..	..
D Hawkshead (Tower Bank Sawrey)	Miss Alcock-Beck.	5	1 0	342	65·1	69·05	236	189
Hawkshead (Foundation Sch.)	J. Lowe Handley, Esq.	5	1 0	214	..	73·74	..	..
d Hawkshead (Bettyfold)	H. T. Gnosspelius, Esq.	5	1 0	500	..	79·92	..	..
M†Hawkshead (Black Fell)	Miss C. Marshall.	5	1 6	1055	..	(80·97)	..	..
D Ambleside (Skelwith Fold)	Miss C. Marshall.	5	1 0	333	..	84·62	208	189
3.—KENT & C. 45 sq. mi.								
d Heysham Harbour	L. M. & S. Rly Co.	5	1 6	25	..	37·62	..	..
D Morecambe	H. Morgans, Esq.	8	1 0	25	..	39·01	186	155
D Yealand Conyers (Beechfield)	Miss E. Roper.	5	1 0	250	..	38·62	189	145
D Yealand Conyers (Morecambe Lo.)	J. Rawlinson Ford, Esq.	5	1 0	278	..	45·47	210	171
Grange-over-Sands (Nutwood)	J. Steen, Esq.	5	1 0	140	..	48·03	..	..
D Grange-over-Sands (Holmcroft)	R. Rhodes, Esq.	5	1 3	45	..	46·67	219	166
D Lindale (Ellerhow)	Lady Tomlinson.	5	1 5	300	..	53·84	211	183
D Cartmel Fell (The Schoolhouse)	R. J. Cragghill, Esq.	5	1 0	220	54·9	62·87	231	191

† Gauge over-exposed on Moor.

DIVISION VIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
NORTH LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—LUNE. 135 sq. mi.								
D Hampson-in-Ellel	John Welch, Esq.	5	1 0	145	..	42·91	204	164
D Quernmore (Brow Top)	F. Hill, Esq., C.E.	8	1 0	552	..	51·79	196	175
Bowland Forest (High Salter)	J. T. Sanderson, Esq.	5	1 0	1014	..	57·85	..	..
Bowland Forest (Whitray)	J. T. Sanderson, Esq.	5	1 0	1139	..	68·90	..	..
Bowland Forest (Lower Salter)	J. T. Sanderson, Esq.	5	1 0	572	..	58·20	..	..
D Lancaster (Strathspey)	A. B. S. Welch, Esq.	5	1 0	87	..	44·32	218	162
d Lancaster (The Friends School)	G. A. Watson, Esq.	5	1 0	55	..	41·70	..	..
D Lancaster (Blea Tarn Res.)	F. Hill, Esq., C.E.	8	1 0	410	..	43·40	214	171
D Lancaster (Greg Obsy.)...(+A)	Neville Holden, Esq.	8	1 0	312	*41·0*	45·86	215	164
D Lancaster (Lune Aqueduct)	F. G. T. Adams, Esq.	8	3 7	74	..	43·91	213	176
D Wray (Wray House)	Baldwin Bent, Esq,. C.E.	5	1 6	170	..	46·12	223	173
D Wennington (Tatham Rectory)	Rev. A. S. Roberts	5	1 3	150	..	45·86	212	175
5.—WYRE & C. 213 sq. mi.								
D Weeton Reservoir (No. 1)	Fylde Water Board	5	1 0	133	..	41·34	210	169
D Blackpool (Met. Observatory)	E. W. Rees Jones, Esq., M.D.	5	1 0	67	33·4	39·92	216	156
D Barton (Newsham House)	W. B. S. Smith, Esq.	5	1 0	104	..	46·75	202	179
D Kirkham (Elswick Lodge)	L. G. King, Esq.	5	1 4	52	*37·9*	39·01	186	145
D St. Michael's-on-Wyre Vicarage	Ven. Archdeacon Hornby	5	1 0	26	*36·6*	41·70	217	160
D Fleetwood	Engineer and Surveyor	8	2 6	27	..	39·61	207	150
D Garstang (Barnacre Reservoir)	Fylde Water Board	5	1 0	616	*46·4*	52·89	222	180
D Garstang (Grizedale Reservoir)	Fylde Water Board	5	1 0	517	43·6	51·22	221	184
Garstang (Calder Intake)	Fylde Water Board	5	1 0	632	..	51·65	..	..
Garstang (Grizedale Intake)	Fylde Water Board	5	1 0	644	..	51·13	..	..
D Wyresdale (Abbeystead Res.)	F. Hill, Esq., C.E.	8	1 0	366	..	53·30	230	195
D Abbeystead Gardens	Mr. Geo. Penk	5	1 0	420	..	56·58	236	196
Quernmore (Old Gauge Basin)	F. Hill, Esq., C.E.	8	1 0	963	..	54·53	..	..
M Wyresdale (Wardstone)	F. Hill, Esq., C.E.	8	1 0	1440	..	67·26	..	..
6.—INSULAR. 4 sq. mi.								

DIVISION IX—YORKSHIRE.

WEST RIDING. (Area, 2,791 sq. mi.)

1.—LUNE. 178 sq. mi.								
D Austwick (Leigh House)	R. Stockdale, Esq.	5	1 0	500	..	47·34	215	165
D Austwick (Beck House)	Rev. J. Turner	5	1 1	475	..	47·87	229	170
D High Bentham (Inglefield)	Geoffrey Holmes, Esq.	5	1 0	412	..	43·64	213	179
D Sedbergh (Brigflatts)	The Misses Wilson	5	1 0	305	..	60·08	218	181
D Sedbergh (The Leyes)	Rev. A. J. K. Martyn	5	..	400	..	59·12	220	189
D Sedbergh (Havera Bank)	A. Mountain, Esq.	5	1 0	450	..	63·78	221	194
2.—RIBBLE. 225 sq. mi.								
D Colne (Laneshaw Reservoir)	J. F. Bedford, Esq., C.E.	5	1 0	842	..	47·47	224	174
D Barnoldswick (Rainhall Road)	Asa Burniston, Esq.	5	1 2	549	..	43·50	211	169
Barnoldswick (Greenberfield L.)	Leeds & L'pool Canal Co.	8	1 0	488	..	47·48	..	..
D Slaidburn (Thorneyholme)	Mr. G. Marr	5	1 6	380	..	64·49	215	196
D Slaidburn (Hareden Valley)	E. C. Oakes, Esq., C.E.	8	1 2	556	..	72·29	239	198
D Slaidburn (Langden Brook)	E. C. Oakes, Esq., C.E.	8	1 2	556	..	73·87	249	199
D Slaidburn (Dunsop Houses)	H. M. Webb, Esq., C.E.	8	1 6	450	62·9	67·08	218	195
D Slaidburn (Footholme)	H. M. Webb, Esq., C.E.	8	1 6	565	..	64·66	215	190
M Slaidburn (Middle Knoll)	H. M. Webb, Esq., C.E.	5	1 0	1288	..	73·68	..	..
D Slaidburn (Brennand)	H. M. Webb, Esq., C.E.	8	1 6	820	..	70·04	213	196
D Slaidburn (Croasdale House)	H. M. Webb, Esq., C.E.	8	1 6	600	..	52.83	220	193
D† Slaidburn (Croasdale Valley)	H. M. Webb, Esq., C.E.	8	1 6	720	..	42·72	220	168

† Gauge over-exposed.

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—RIBBLE—(*con.*).								
D	Slaidburn (Whitendale)	H. M. Webb, Esq., C.E.	8	1 6	830	..	70·77	213	194
M	Slaidburn (Cabin Hill)	H. M. Webb, Esq., C.E.	5	1 0	1559	..	73·70	..	..
M	Slaidburn (Baxton Fell)	H. M. Webb, Esq., C.E.	5	1 0	1525	..	81·40	..	..
M	Slaidburn (Saddle Hill)	H. M. Webb, Esq., C.E.	5	2 6	1475	..	54·55	..	..
D	Settle (Cappleside)	Mrs. Geldard	5	0 10	500	..	55·95	226	187
D	Settle (Gas Works)	J. W. Shepherd, Esq.	8	1 0	450	..	51·33	218	181
D	Settle (Giggleswick School)	P. Haswell, Esq., M.A.	8	1 0	575	..	46·41	207	176
d	Horton-in-Ribblesdale	Nathaniel Hunt, Esq.	5	1 0	800	..	58·67	..	..
	3.—MERSEY—Irwell. 2 sq. mi.								
	4.—MERSEY, UPPER. 35 sq. mi.								
	Greenfield (Upperwood Moor)	M. T. B. Whitson, Esq., C.E.	5	1 0	1518	*46·5*	55·28	..	..
D	Greenfield (Chew Mount)	M. T. B. Whitson, Esq., C.E.	5	1 0	1578	*52·2*	65·25	237	198
	Greenfield (Chew Reservoir)	M. T. B. Whitson, Esq., C.E.	5	1 0	1648	..	66·34	..	..
D	Greenfield (Yeoman Hey)	M. T. B. Whitson, Esq., C.E.	5	1 0	759	*50·4*	60·07	226	198
	Greenfield (Ashway Moss)	M. T. B. Whitson, Esq., C.E.	5	1 0	1581	*37·1*	55·65	..	..
	Greenfield (Birchen Clough)	M. T. B. Whitson, Esq., C.E.	5	1 0	1018	*53·2*	57·38	..	..
	Saddleworth Station	L. M. & S. Rly.	5	4 10	630	..	51·96	..	..
D	Oldham (Strinesdale) *new*	C. J. Batley, Esq., C.E.	5	1 0	791	*35·9*	50·89	225	180
D	Standedge (Cas Shaw Broadh'd) *new*	C. J. Batley, Esq., C.E.	8	1 0	957	*41·8*	63·34	255	212
M	Standedge (Redbrook Res.)	L. M. & S. Rly.	8	2 0	1150	*45·7*	58·71	..	..
D	Denshaw C.E. School	The Head Teacher	8	1 1	870	..	60·00	236	194
D	Denshaw (Ox Hey) *new*	C. J. Batley, Esq., C.E.	8	1 0	1031	*42·7*	58·17	246	190
D	Denshaw (Crawshaw Hey)	C. J. Batley, Esq., C.E.	8	1 0	956	..	60·19	246	194
D	Denshaw (New Year's Br.) *new*	C. J. Batley, Esq., C.E.	8	1 0	986	..	56·66	246	195
	5.—TRENT—Derwent. 7 sq. mi.								
M	Derwent Dale (Abbey Brook) .65	S. B. Winser, Esq., C.E.	5	1 0	825	*44·9*	59·54	..	..
M	Derwent Dale (Howden Cl'gh) .64	S. B. Winser, Esq., C.E.	5	1 0	1030	*43·0*	59·77	..	..
	Derwent Dale (Howden Ho.) .19	S. B. Winser, Esq., C.E.	8	1 0	890	*42·9*	58·03	..	..
M	Derwent Dale (Sandy Lee) No. 7	S. B. Winser, Esq., C.E.	5	1 0	1340	*45·7*	59·93	..	..
	6.—TRENT—Left Bank Tributaries. 143 sq. mi.								
D	Lindrick Common (Woodside)	J. F. Eardley, Esq.	5	1 0	250	..	34·67	165	133
	7.—OUSE—Don. 564 sq. mi.								
D	Sheffield W.W. (Redmires R.) (R)	Sheffield Corporation W.W.	10	5 0	1110	40·3	45·86	223	177
	Sheffield W.W. (Redmires Res.)	Sheffield Corporation W.W.	8	4 0	1110	..	45·36	..	..
	Rivelin (Oaking Clough)	Sheffield Corporation W.W.	8	1 6	1160	*39·5*	47·59	..	..
	Rivelin (Middle Moss)	Sheffield Corporation W.W.	5	1 6	1168	*40·5*	48·70	..	..
D	Sheffield W.W. (Rivelin)	Sheffield Corporation W.W.	8	1 6	564	*35·7*	44·60	210	164
D	Sheffield W.W. (Crookes) (R)	Sheffield Corporation W.W.	10	2 0	629	*29·9*	36.33	197	135
	Sheffield W.W. (Crookes)	Sheffield Corporation W.W.	8	2 0	629	*29·9*	36·17	..	..
D	Sheffield (Weston Park)	E. Howarth, Esq.	8	1 0	428	30·4	36·18	203	140
	Loxley Valley (Broadcar)	Sheffield Corporation W.W.	5	1 0	1004	*45·4*	53·73	..	..
	Loxley V. (Oaks Fm. Damflask)	Sheffield Corporation W.W.	5	1 0	650	..	41·65	..	..
	Loxley V. (Loftshaw, Strines)	Sheffield Corporation W.W.	5	1 0	1011	*44·3*	52·19	..	..
	Loxley V. (Dale Dike Res.)	Sheffield Corporation W.W.	8	1 6	715	*40·9*	51·15	..	..
	Loxley V. (Thornseat)	Sheffield Corporation W.W.	5	1 0	1326	..	53·35	..	..
	Loxley V. (Rocher Flat)	Sheffield Corporation W.W.	5	1 0	1106	*38·3*	46·14	..	..
	Loxley V. (Emlin Moor)	Sheffield Corporation W.W.	5	1 0	998	..	54·53	..	..
D	Rotherham (Ulley Res.) (2)	Vincent Turner, Esq., C.E.	5	1 0	184	..	31·05	170	128
D	Rotherham (Ulley Res.) (1)	Vincent Turner, Esq., C.E.	5	1 0	184	..	28·88	170	127
D	Rotherham (Ulley Res.) (3)	Vincent Turner, Esq., C.E.	5	1 0	132	..	30·39	170	127
D	Wincobank (Sewage Works) (+A)	J. Haworth, Esq.	5	2 0	90	..	31·54	191	131
D	Rotherham (Sitwell Vale)	G. Howard, Esq.	5	1 0	300	27·0	32·55	201	146
D	Rotherham (Kimberw'rth Sch.)	Vincent Turner, Esq., C.E.	5	1 0	258	..	32·17	196	141
D	Rotherham (Aldwarke Sew. Wks.)	James H. Kershaw, Esq.	5	1 4	71	..	30·56	200	139
D	Rotherham (Thrybergh)	F. O. Kirby, Esq., C.E.	8	1 0	184	*24·9*	30·77	193	131
D	Rawmarsh	L. Atkinson, Esq.	5	1 0	230	..	28·81	190	128
D	Ecclesfield (Sewage Works)	F. Thurlby, Esq., M.C., C.E.	8	1 0	172	..	33·77	209	155
D	Conisborough (Firsby Res.)	F. O. Kirby, Esq., C.E.	8	1 4	189	..	32·95	203	134
	Ewden (Middle Moss)	Sheffield Corporation W.W.	5	1 0	1600	*53·0*	60·29	..	..
	Ewden (Wightwizzle)	Sheffield Corporation W.W.	5	1 0	860	*43·0*	53·59	..	..
†	Ewden (Margery Hill) No. 1	Sheffield Corporation W.W.	5	1 0	1790	*51·0*	58·71	..	..
	Ewden (Brown Edge)	Sheffield Corporation W.W.	5	1 0	1325	*52·5*	59·41	..	..

† Gauge over-exposed on Moor.

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—OUSE—Don—(*con.*).								
D	Wentworth Woodhouse	Mr. A. Third	5	0 10	360	..	34·03	183	135
D	Mexborough	G. Fenwick Carter, Esq., C.E.	5	1 6	77	..	28·58	184	134
	Wortley (Service Reservoir)	J. R. Fox, Esq., C.E.	5	1 0	700	30·0	39·25	215	162
	Midhope Moor (Barnside)	J. R. Fox, Esq., C.E.	5	1 0	1000	43·4	58·66	249	184
D	Little Don Val. (Underbank Res.)	Sheffield Corporation W.W.	8	1 6	604	35·0	46·04	212	161
	Little Don Val. (Brockholes)	Sheffield Corporation W.W.	5	1 6	934	34·1	45·86	..	..
	Little Don Val. (Sheep House)	Sheffield Corporation W.W.	5	1 6	945	34·3	42·61	..	..
D	Little Don Val. (Bridge Lane)	Sheffield Corporation W.W.	8	1 0	761	37·3	51·35	238	166
	Langsett Moor (Midhope)	J. R. Fox, Esq., C.E.	5	1 0	830	40·3	44·10	232	162
D	Langsett Moor (Up. Midhope)	Sheffield Corporation W.W.	8	1 6	925	39·9	50·04	231	164
	Langsett Moor (Mickleden)	Sheffield Corporation W.W.	5	1 6	1217	46·8	59·87	..	..
	Langsett Moor (Catclough)	Sheffield Corporation W.W.	8	1 6	1516	46·4	63·69	..	..
	Langsett Moor (Fiddlers Green)	Sheffield Corporation W.W.	8	1 6	1493	48·0	61·93	..	..
	Langsett Moor (Border Hill)	Sheffield Corporation W.W.	5	1 6	1148	46·1	56·04	..	..
D	Langsett Moor (Swinden Lodge)	Sheffield Corporation W.W.	8	1 6	1037	43·3	54·30	248	176
D	Langsett Moor (Flouch Road)	Sheffield Corporation W.W.	8	1 0	960	39·3	52·86	237	168
D	Wath-upon-Dearne (Chapel St.)	Dr. T. Crowley	8	1 3	188	24·8	29·24	195	137
D	Doncaster (Pumping Station)	F. O. Kirby, Esq., C.E.	5	1 6	30	..	32·27	181	132
D	Doncaster (Avenue Road)	M. H. Stiles, Esq.	5	1 3	60	..	33·54	183	129
D	Bolton-on-Dearne (Goldthorpe)	E. Washington, Esq.	5	1 6	93	..	31·37	204	141
W	Dunford Bridge (Windledon)	Dewsbury Water Works	8	2 2	1100	..	59·89	..	..
D	Dunford Bridge Res.	Dewsbury Water Works	8	2 0	1111	..	59·08	232	189
W	Dunford Bridge (Dearden)	Dewsbury Water Works	8	1 6	1244	..	58·12	..	..
W	Dunford Bridge (Harden)	Dewsbury Water Works	8	2 0	1300	..	58·10	..	..
W	Dunford Bridge (Snailsden)	Dewsbury Water Works	8	2 0	1477	..	61·26	..	..
D	Darfield Sewage Works	F. Oliver, Esq.	5	1 6	106	..	29·27	180	137
	Penistone (Scout Dike Res.)	J. R. Fox, Esq., C.E.	5	1 0	730	..	44·76	243	172
	Penistone (Ingbirchworth Res.)	J. R. Fox, Esq., C.E.	5	1 0	853	*38·3*	50·72	227	144
	Penistone (Broadstone Res.)	J. R. Fox, Esq., C.E.	5	1 0	..	..	48·21	224	167
D	Barnsley (Jordan Hill)	J. R. Fox, Esq., C.E.	5	1 0	460	26·2	34·64	211	153
D	Bentley Colliery	Messrs. Barber, Walker & Co., Ltd.	5	1 0	23	..	29·98	185	126
D	Cawthorne (Cannon Hall)	J. M. Spencer Stanhope, Esq.	5	0 11	418	28·8	36·97	188	150
D	Barnsley (Burntwood Hall)	J. Dymond, Esq.	5	1 0	378	..	35·97	216	151
d	Kirk Bramwith	C. E. Farran, Esq., C.E.	5	1 6	22	..	29·42	..	121
D	Ackworth School	The Headmaster	8	1 0	125	*25·1*	30·83	183	135
D	Goole	Aire & Calder Navigation	5	1 0	18	22·9	27·78	173	129
	8.—OUSE—Aire—Calder. 361 sq. mi.								
D	Holmbridge (Yateholme Res.)	W. H. Duckworth, Esq., C.E.	5	1 0	1009	60·1	69·58	249	196
D	Holmbridge (Yateholme Farm)	W. H. Duckworth, Esq., C.E.	5	1 0	861	57·9	68·99	249	194
	Holmbridge (Bilberry Res.)	Messrs. Mallinson & Son.	5	1 0	970	55·9	61·21	..	..
	Holmfirth (Holme Styes Res.)	Messrs. Mallinson & Son.	5	1 0	830	45·9	55·10	..	..
	Holmfirth (Boshaw Whams R.)	Messrs. Mallinson & Son.	5	1 0	930	49·6	53·12	..	..
D	Holmfirth (Thongsbridge)	Mrs. Robson	8	1 0	..	..	56·94	215	171
D	Holmfirth (Snape Res.)	Holmfirth U.D.C.	6	1 0	1060	..	55·95	240	185
	Meltham (Harden Moss)	J. W. Armitage, Esq., C.E.	8	1 0	1212	47·1	55·50	..	..
	Meltham (Harden Moss) *new g.*	J. W. Armitage, Esq., C.E.	8	1 0	1212	..	57·51	..	..
	†Wessenden Head *new g.*	J. W. Armitage, Esq., C.E.	8	1 0	1200	..	56·03	..	..
	Wessenden (Holly Bank Moss)	J. W. Armitage, Esq., C.E.	8	1 0	1280	..	56·19	..	..
	†Wessenden (Old Reservoir)	J. W. Armitage, Esq., C.E.	8	1 0	940	..	53·40	..	..
	Wessenden (Butterley Moss)	J. W. Armitage, Esq., C.E.	8	1 0	1110	..	56·07	..	..
	†Wessenden (Bobus)	J. W. Armitage, Esq., C.E.	8	1 0	1200	*43·4*	44·87	..	..
	†Meltham (Brow Grains)	J. W. Armitage, Esq., C.E.	8	1 0	900	*45·6*	53·61	..	..
	Meltham (Royd Edge)	C. L. Brook, Esq.	8	1 0	585	49·0	56·36	..	..
D	Meltham (Harewood Lodge)	C. L. Brook, Esq.	8	1 0	514	44·5	54·25	225	182
	Meltham Grange	J. W. Armitage, Esq., C.E.	8	1 0	850	*41·2*	51·07	..	..
	*Marsden Reservoir	L.M. & S. Rly.	8	2 4	692	..	59·32	..	..
	Marsden (Deer Hill)	J. W. Armitage, Esq., C.E.	8	1 0	1149	*43·3*	54·57	..	..
	Marsden (Deer Hill) *new g.*	J. W. Armitage, Esq., C.E.	8	1 0	1149	*45·5*	55·70	..	..
D	Slaithwaite (Blackmoorfoot)	J. W. Armitage, Esq., C.E.	8	1 0	800	44·1	51·22	260	189
D	Slaithwaite (Inglewood)	J. Woodhead, Esq.	5	1 0	546	*45·5*	54·18	254	187
D	Huddersfield (Bank Field, Golcar)	Miss M. J. R. Sykes	6	1 0	400	*40·2*	51·37	202	163
D	Huddersfield (Ravensknowle)	Dr. Woodhead	8	0 11	325	..	38·54	215	159
W	Huddersfield (Langley Ter.) (No. 1)	S. Morris Bower, Esq.	5	1 0	761	..	43·76	..	..

* Gauge on a steep bank. † Gauge in 6ft. square iron hurdle fence, 6ft. high.

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	8.—OUSE—Aire—Calder—(*con.*).								
	Huddersfield(Crosland Rd.) (No. 2)	S. Morris Bower, Esq.	4	1 0	761	..	42·84	..	..
D	Huddersfield (Oakes)	S. Morris Bower, Esq.	5	1 0	761	..	43·04	224	178
w	Moss Moor (Linsgreave)	C. Clemesha Smith,Esq.,C.E.	5	1 0	1264	..	63·32	..	..
D	Rishworth (G. Walden Edge) *old*	C. Clemesha Smith,Esq.,C.E.	8	1 2	1135	*49·2*	61·49	254	203
D	Rishworth (G. Walden Edge) *new*	C. Clemesha Smith,Esq.,C.E.	5	1 0	1078	*49·2*	63·00	254	206
w	Rishworth (Stott Hall) *old*	C. Clemesha Smith,Esq.,C.E.	8	1 0	937	..	58·36	..	..
w	Rishworth (Stott Hall) *new*	C. Clemesha Smith,Esq.,C.E.	5	1 0	935	..	57·65	..	..
D	Rishworth Lodge	C. Clemesha Smith,Esq.,C.E.	5	0 11	950	..	56·64	244	190
D	Rishworth (Green Withens Res.)	C. Clemesha Smith,Esq.,C.E.	5	1 0	1205	..	59·99	254	196
D	Rishworth (Ringstone Res.) (No. 1)	C. Clemesha Smith,Esq.,C.E.	5	1 0	980	*42·6*	52·42	250	185
D	Rishworth (Ringstone Res.) (No. 2)	C. Clemesha Smith,Esq.,C.E.	5	1 0	962	*42·6*	57·16	250	189
w	Rishworth Moor (Greystones)	C. Clemesha Smith,Esq.,C.E.	5	1 4	1192	..	61·29	..	..
D	Soyland Moor (Rishworth Drain)	C. J. Batley, Esq., C.E.	8	1 0	1290	..	64·33	250	201
w	Soyland Moor (Summit) (No. 1)	C. Clemesha Smith,Esq.,C.E.	5	1 0	1280	..	54·50	..	..
w	Soyland Moor (Summit) (No. 2)	C. Clemesha Smith,Esq.,C.E.	5	0 11	1218	..	59·63	..	..
D	Soyland Moor (Stansfield Hey)	C. Clemesha Smith,Esq.,C.E.	5	1 0	700	..	54·57	235	182
D	Soyland Moor (Baitings Gate)	C. Clemesha Smith,Esq.,C.E.	5	1 0	943	*50·1*	62·59	245	196
D	Soyland Moor (Byron Edge)	C. J. Batley, Esq., C.E.	8	1 0	1251	..	57·68	249	191
w	Soyland Moor (Manshead)	C. Clemesha Smith,Esq.,C.E.	5	1 0	1225	..	60·68	..	..
D	Walsden (White Holme)	C. J. Batley, Esq., C.E.	8	1 0	1240	..	56·67	250	192
D	Walsden (Calf Lee)	Rochdale Corporation	8	1 0	960	*39·6*	59·65	252	193
D	Walsden (Warland Res.)	Rochdale Corporation	8	1 0	1245	..	63·75	257	202
D	Walsden (Warland Drain)	Rochdale Corporation	8	1 0	1250	..	58·89	251	196
	Walton Hall	E. T. B. Simpson, Esq.	5	0 10	137	..	31·18	..	..
D	Horbury (Durkar House)	H. J. Wells, Esq.	8	1 0	140	..	31·81	201	147
D	Horbury (Addingford Hos.)	J. H. Horsfall, Esq.	8	1 0	169	..	31·40	194	152
	Horbury (Highfields)	J. H. Green, Esq.	5	1 0	226	..	31·46	..	..
D	Mirfield (Cote Wall)	F. P. Mitchell, Esq.	8	1 0	200	30·2	36·67	189	159
d	Wakefield (Northgate)	J. H. Garner, Esq.	8	1 0	174	..	30·04	..	..
D	Wakefield (Clarence Park)	C. Clemesha Smith,Esq.,C.E.	5	1 0	124	25·4	32·12	212	145
D	Wakefield (Fieldhead Res.)	C. Clemesha Smith,Esq.,C.E.	5	1 0	250	..	28·41	171	147
D	Normanton (Haw Hill Park)	The Surveyor, U.D.C.	8	1 1	136	..	28·75	196	136
D	Sowerby Br. (Haugh End) Lt. S. G.	C. Rawson, R.N., Retd.	5	1 0	450	*41·9*	48·71	215	170
w	Walsden (Ramsden Hill)	Rochdale Corporation	5	1 0	1326	..	59·85	..	..
D	Walsden (Ramsden Reservoir)	Rochdale Corporation	5	1 0	993	..	60·87	233	190
D	Todmorden (Fielden Hospital)	S. A. Crabtree, Esq.	5	1 0	650	..	58·06	249	193
D	Todmorden (Sourhall Hospital)	S. A. Crabtree, Esq.	5	1 0	1020	*54·1*	61·07	232	183
d	Halifax (Public Library)	E. Green, Esq.	8	1 0	625	*34·7*	43·58	(222)	(180)
D	Dewsbury(Mitchell Laithes Sew.Wks.)	The Manager	8	1 0	115	..	28·41	187	142
D	Dewsbury (Crow Nest Park)	H. Roscoe, Esq.	8	0 9	277	..	32·57	228	151
D	Batley (Staincliffe Reservoir)	W. H. Duckworth, Esq.,C.E.	5	1 0	492	..	32·48	190	153
D	Ardsley (Jaw Hill Filters)	C. Clemesha Smith,Esq.,C.E.	5	1 0	315	..	29·42	185	149
D	Ardsley Reservoir No. 1	C. Clemesha Smith,Esq.,C.E.	5	1 2	395	..	31·39	201	147
D	Ardsley Reservoir No. 2	C. Clemesha Smith,Esq.,C.E.	5	1 2	326	..	31·22	201	148
D	Halifax W.W. (Albert)	E. P. Brook, Esq., C.E.	5	1 0	795	*36·4*	47·94	235	178
D	Halifax W.W. (Gibbet)	E. P. Brook, Esq., C.E.	5	1 0	568	*35·9*	46·55	215	171
D	Halifax W.W. (Ramsden Wood)	E. P. Brook, Esq., C.E.	5	1 0	815	..	51·68	228	185
D	Hebden Bridge (Burnside)	Miss M. Hoyle,	5	1 0	830	*44·2*	56·91	257	197
D	Halifax W.W. (Castle Carr Lo.)	E. P. Brook, Esq., C.E.	5	1 0	1060	*41·3*	54·92	255	199
w	Halifax W.W. (Midgley Mr.) *new*	E. P. Brook, Esq., C.E.	8	1 0	1350	*47·5*	55·71	..	..
w	Halifax W.W. (Warley Mr.) *new*	E. P. Brook, Esq., C.E.	8	1 0	1325	*44·9*	54·19	..	..
D	Halifax W.W. (Ogden)	E. P. Brook, Esq., C.E.	5	1 0	990	*43·4*	57·20	232	186
w	Halifax W.W. (Ovenden Mr.) *new*	E. P. Brook, Esq., C.E.	8	1 0	1375	*45·7*	55·15	..	..
w	Halifax W.W. (Gorple)	E. P. Brook, Esq., C.E.	8	1 0	1320	..	49·19	..	..
D	Halifax W.W. (Gorple Res.)	E. P. Brook, Esq., C.E.	5	1 6	1028	..	54·17	242	188
D	Halifax W.W. (Widdop)	E. P. Brook, Esq., C.E.	5	1 0	1050	*47·1*	58·69	235	198
D	Halifax W.W. (Walshaw Dean L.)	E. P. Brook, Esq., C.E.	5	1 0	1040	*48·8*	59·00	238	202
w	Halifax W.W. (Walshaw Dean)	E. P. Brook, Esq., C.E.	8	1 0	1380	*45·9*	50·79	..	..
	9.—OUSE—Aire. 504 sq. mi.								
D	Pontefract (The King's School)	A. Hudson, Esq.	5	1 0	189	..	27·13	175	134
D	Pontefract (Roall W.W.)	W. H. Newton, Esq., C.E.	8	1 0	42	..	28·17	196	119
	Bradford (Grange Rd., Horton)	A. E. Chilton, Esq.	5	3 0	450	*35·0*	42·87	216	168
	Bradford (Brayshaw Reservoir)	Bradford Corporation W.W.	5	1 0	982	*37·1*	44·89	..	..

DIVISION IX—YORKSHIRE—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
9.—OUSE—Aire—(*con.*).								
D Bradford (Lister Park)	Mr. J. Moorby	8	1 0	439	31·4	43·01	205	170
D Bradford (Thornton Moor Filters)	Bradford Corporation W.W.	5	1 0	1190	*43·9*	58·67	244	207
D Bradford (Stubden Res.)....No. 8.	Bradford Corporation W.W.	5	1 0	1071	44·9	52·94	228	187
M Bradford (Nan Scar, Oxenhope)	Bradford Corporation W.W.	5	1 0	1101	*46·9*	56·11	..	..
M Bradford (Stairs Top, Oxenhope)	Bradford Corporation W.W.	5	1 0	1360	*47·9*	64·46	..	..
D Bradford (Leeming Reservoir)	Bradford Corporation W.W.	5	1 0	850	*40·6*	53·33	242	189
M Bradford (Doe Park Reservoir)	Bradford Corporation W.W.	5	1 0	760	40·7	50·80	..	..
M Bradford (Leeshaw Res.)	Bradford Corporation W.W.	5	1 0	875	*48·2*	60·48	..	..
D Bradford (Chellow Dean Res.)	Bradford Corporation W.W.	5	1 0	645	*35·6*	48·34	217	172
D Bradford (Chellow Heights Res.)	Bradford Corporation W.W.	5	1 0	848	*36·6*	48·36	232	174
Bradford (Hewenden Res.)	Bradford Corporation W.W.	5	1 0	701	*38·6*	48·98	..	..
M Bradford (Heaton Reservoir)	Bradford Corporation W.W.	5	1 0	531	*32·1*	42·84	..	..
Leeds (Wortley Reservoir)	H. Shortreed, Esq., C.E.	8	0 9	307	*29·3*	36·18	199	156
Leeds (Great George Street)	H. Shortreed, Esq., C.E.	5	0 9	180	..	32·07	192	153
d Leeds (Kingfisher)	Greevz Fysher, Esq.	5	14 0	247	..	32·88	(188)	(144)
Leeds (Woodhouse Moor)	H. Shortreed, Esq., C.E.	8	0 9	307	26·7	32·30	216	159
D Seacroft (Leeds City Hospital)	Dr. J. S. Anderson	8	1 0	235	..	36·06	199	146
Leeds (Weetwood Res.)	H. Shortreed, Esq., C.E.	8	0 9	328	..	36·23	223	164
D Leeds (Weetwood Garth)	Mrs. F. Gott, J.P.	5	1 0	300	..	34·78	173	151
D Leeds (Weetwood)	F. J. Kitson, Esq.	5	2 0	250	..	34·59	185	151
Leeds (Allerton Hill)	T. Harding Churton, Esq.	5	0 8	418	*27·5*	34·30	..	..
D Haworth (Harbour Lodge)	A. Atkinson, Esq., C.E.	8	1 0	1187	*52·7*	62·17	243	208
D Haworth (Lower Laithe Res.) (+A)	A. Atkinson, Esq., C.E.	6	0 10	772	..	57·69	240	188
D Oakworth (Oldfield Filters)	A. Atkinson, Esq., C.E.	5	1 0	1008	..	57·07	237	188
D Bingley (Sewage Works)	J. R. Brown, Esq.	5	1 1	227	..	45·24	212	168
D Rawdon	Rawdon U.D.C.	5	1 0	579	..	37·76	204	152
D Bingley (Gilstead Filters)	Bradford Corporation W.W.	5	1 0	572	*29·3*	44·31	215	166
D Bingley (Park Top)	M. E. Burton, Esq.	5	1 0	650	..	44·91	244	170
D Adel (Lawns Wood Cemetery)	L. Hodgson, Esq.	5	1 0	475	..	46·73	272	212
D Keighley (The Knowle)	P. Clough, Esq.	5	1 0	390	..	44·15	223	169
D Keighley (Victoria Park)	Mr. R. Butterfield	5	1 0	304	..	43·93	225	174
D Bingley (East Morton)	J. Rhodes, Esq.	5	1 0	530	..	40·74	225	168
Bingley (Sunnydale Reservoir)	Bradford Corporation W.W.	5	1 0	825	*33·8*	39·76	..	..
D Salterforth (Barnoldswick W.W.)	J. P. Thompson, Esq.	8	1 4	832	..	54·49	225	184
D Earby (Sewage Works)....(+A)	H. Pritchard, Esq., C.E.	5	1 9	426	..	44·75	218	162
M Silsden (Gill Grange)	Bradford Corporation W.W.	5	1 0	883	*31·6*	38·50	..	..
D Silsden Reservoir	Bradford Corporation W.W.	5	1 0	560	*31·0*	41·41	213	177
M Silsden (Cringles Res. Site)	Bradford Corporation W.W.	5	1 0	715	*32·3*	41·12	..	..
D†Elslack (Stories Farm)	J. P. Thompson, Esq.	5	0 7	675	..	35·36	201	150
Carleton (Beech Hill)	W. Cyril Empson, Esq.	8	1 3	425	..	44·88	..	..
D Skipton (Town Hall) ....(A)	A. E. W. Aldridge, Esq.	6	1 6	367	..	38·95	223	162
Gargrave (Banks Hill Bank Nwtn.)	Leeds & Liv'pool Canal Co.	8	1 0	545	..	38·20	..	..
Gargrave (Ray Bridge Hill)	Leeds & Liv'pool Canal Co.	8	0 10	459	..	48·39	..	..
D Rylstone Rectory	Rev. Canon C. H. Lowe.	6	0 10	700	..	41·92	226	183
Winterburn (Long Hill)	Leeds & Liv'pool Canal Co.	8	1 0	705	..	42·32	..	..
Winterburn (Brown Hill)	Leeds & Liv'pool Canal Co.	8	1 0	961	..	46·93	..	..
10.—OUSE—Wharfe. 408 sq. mi.								
D Aberford (Lotherton Hall)	Col. R. T. T. Gascoigne, D.S.O.	5	1 0	208	..	31·90	176	142
Adel (Eccup, East)	H. Shortreed, Esq., C.E.	8	0 9	375	..	38·78	235	162
Harewood (Arthington)	H. Shortreed, Esq., C.E.	8	0 9	139	..	36·28	220	159
Harewood House	Dowager Countess of Harewood.	5	0 10	300	..	39·98	197	160
D Otley (Sewage Works)	C. F. Hodgson, Esq., C.E.	5	1 0	172	..	34·39	181	132
D Ilkley (Silverwell Cottage)	Surveyor, U.D.C.	5	1 0	900	..	47·17	228	186

† Gauge over-exposed.

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	10.—OUSE—Wharfe—(*con.*).								
D	Ilkley (Spence's Garden)	Surveyor U.D.C.	5	1 0	314	..	44·35	212	179
D	Ilkley (Crossbeck Road)	Rev. W. Robinson	5	1 6	570	..	46·02	230	172
	Leathley (Lindley Wood, S.)	H. Shortreed, Esq., C.E.	8	0 9	312	..	38·07	215	157
D	Ilkley (March Gill Reservoir)	C. F. Hodgson, Esq., C.E.	5	1 0	655	..	44·80	238	176
D	York (Middlethorpe Hall)...No. 2.	Mr. J. Fletcher	5	1 0	48	..	30·69	206	144
D	York (Chalfonts)	Arnold S. Rowntree, Esq.	5	0 9	50	..	30·01	188	141
D	York (Bishopthorpe Road)	J. Terry & Sons Ltd.	5	1 0	54	..	28·03	186	134
d	York (Cherry Hill)	Messrs. H. Richardson & Co.	5	1 6	50	24·2	28·11	..	136
D	York (Acomb Landing)	W. H. Humphreys, Esq., C.E.	5	1 0	40	..	28·22	163	133
M	Skipton (Counter Hill)	Bradford Corporation W.W.	5	1 0	951	*31·3*	36·22	..	..
M	Skipton (Chelker Reservoir)	Bradford Corporation W.W.	5	1 0	730	32·9	40·40	..	..
	Fewston (Timble Ings)	H. Shortreed, Esq., C.E.	8	0 9	912	..	42·84	225	175
	Fewston (Swinsty, East)	H. Shortreed, Esq., C.E.	8	0 9	460	..	34·59	187	135
	Fewston, North	H. Shortreed, Esq., C.E.	8	0 9	525	..	42·87	236	167
	Fewston (Blubberhouses)	H. Shortreed, Esq., C.E.	8	0 9	575	..	44·54	228	173
D	Bolton Abbey Estate Office	A. Downs, Esq.	5	1 2	368	..	40·87	230	179
D	Barden Reservoir	Bradford Corporation W.W.	5	1 0	746	*42·9*	47·04	238	188
M	Upper Barden Reservoir	Bradford Corporation W.W.	5	1 0	1170	*40·6*	45·20	..	..
	Thruscross (Lane Head)	H. Shortreed, Esq., C.E.	8	0 9	950	..	42·45	226	168
M	Burnsall (Thorpe Fell)	Bradford Corporation W.W.	5	1 0	1661	*39·4*	42·40	..	..
M	Burnsall (Sandbed Beck)	Bradford Corporation W.W.	5	1 0	676	*42·2*	46·70	..	..
D	Burnsall Rectory	Rev. J. Wood	8	4 1	504	..	49·57	225	185
D	Grimwith Reservoir	Bradford Corporation W.W.	5	1 0	893	*44·9*	52·27	234	200
M	Grimwith (Trunla Hill)	Bradford Corporation W.W.	5	1 0	1201	*38·8*	56·49	..	..
D	Buckden	G. E. Clayton, Esq.	5	1 0	800	..	61·52	223	188
D	Oughtershaw Hall	Miss G. J. Woodd	5	1 6	1175	..	76·33	259	217
	11.—OUSE—Nidd. 254 sq. mi.								
D	Wetherby (Stockeld Park)	H. Demaine, Esq.	5	1 2	200	..	38·75	182	150
	Spofforth (Sewage Works)	C. E. Rivers, Esq., C.E.	5	1 0	184	..	35·99	212	154
D	Tockwith School	W. Kirk, Esq.	5	1 0	200	..	41·01	205	146
D	Wetherby (Ribston Hall)	Mr. W. D. Boddy	5	1 2	130	26·5	36·02	195	156
M	Harrogate W.W. (Ling Cottage)	A. S. West, Esq., C.E.	5	1 0	740	..	41·37	..	..
M	Harrogate W.W. (Broad Dubb)	A. S. West, Esq., C.E.	5	1 0	725	..	40·32	..	..
M	Harrogate W.W. (Cobblers Cott.)	A. S. West, Esq., C.E.	5	1 0	730	..	40·24	..	..
D	Harrogate W.W. (Ten Acres Res.)	A. S. West, Esq., C.E.	8	1 6	620	..	40·47	204	167
D	Harrogate W.W. (Scargill Res.)	A. S. West, Esq., C.E.	8	1 0	646	..	40·95	206	167
D	Harrogate W.W. (Beaver Dyke R.)	A. S. West, Esq., C.E.	8	0 11	575	..	40·41	204	167
M	Harrogate W.W. (John o' Gaunts)	A. S. West, Esq., C.E.	5	1 0	600	..	38·93	..	..
M	Harrogate W.W. (Long Stoop)	A. S. West, Esq., C.E.	5	1 0	700	..	39·09	..	..
M	Harrogate W.W. (Knab's Moor)	A. S. West, Esq., C.E.	5	1 0	700	..	(38·08)	..	..
D	Harrogate (Harlow Moor Obsy.)	C. E. Rivers, Esq., C.E.	5	1 0	478	30·6	35·89	207	144
D	Harrogate (Harlow Hill Res.)	A. S. West, Esq., C.E.	8	1 0	589	..	37·07	206	151
d	Harrogate (Duchy Road)	J. S. Farrah, Esq.	5	1 0	450	..	37·38	(201)	(154)
D	Harrogate (Irongate Bridge Res.)	A. S. West, Esq., C.E.	8	1 6	455	..	40·46	208	155
D	Knaresborough (Goldsbro Hall Gdns)	Mr. R. Wilson	5	1 0	112	..	35·51	191	144
D	Knaresborough (The Abbey)	Rev. Canon J. T. Hartley	5	1 0	140	..	35·19	203	161
D	Knaresborough (Water Tower)	A. S. West, Esq., C.E.	8	1 0	240	..	39·92	181	155
	Harrogate (Bilton Sewage Works)	C. E. Rivers, Esq., C.E.	5	1 0	208	..	36·79	196	160
D	Birstwith Hall	Sir F. A. Aykroyd, Bt.	5	1 0	400	..	40·89	218	156
D	Birstwith (Swarcliffe)	Capt. C. S. Greenwood	5	1 0	510	..	39·08	200	156
	Ramsgill (Holme Ho. Gouthwaite)	Bradford Corporation W.W.	5	1 0	464	..	50·85	..	..
D	Ramsgill (Raygill House)	Bradford Corporation W.W.	5	1 0	925	*48·0*	56·02	211	181
D	Ramsgill	Bradford Corporation W.W.	5	1 0	450	*39·4*	51·58	192	171
	Middlesmoor (Stean Moor)	Sir F. A. Aykroyd, Bart.	5	1 0	1100	..	61·86	..	..
M	Nidderdale (East Gill Head)	Bradford Corporation W.W.	5	1 0	1710	*58·6*	66·80	..	..
M	Nidderdale (Rain Stang)	Bradford Corporation W.W.	5	1 0	1470	*48·6*	58·23	..	..
D	Nidderdale (New Houses)	Bradford Corporation W.W.	5	1 0	755	*45·3*	60·93	204	186
D	Nidderdale (West Houses)	Bradford Corporation W.W.	5	1 0	1165	*53·1*	58·43	255	197

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
			in.	*ft. in.*	*ft.*	*in.*	*in.*		
	WEST RIDING—(*con.*).								
	12.—OUSE—Ure. 110 sq. mi.								
	Dallow Moor (Harper Hill)	H. Shortreed, Esq., C.E.	8	0 9	858	..	42·90	180	169
d	Ripon (Studley Royal Gardens)	F. M. Sutherland, Esq.	5	1 0	250	..	(37·06)	..	148
D	Ripon (The Red House)	F. D. Wise, Esq., C.E.	5	1 0	120	..	35·82	185	148
	Kirby Malzeard (Drovers' Inn)	H. Shortreed, Esq., C.E.	8	0 9	576	..	50·02	220	158
	Kirby Malzeard (Hawsett)	H. Shortreed, Esq., C.E.	8	0 9	820	..	46·92	225	178
	Kirby Malzeard (Hambleton H.)	H. Shortreed, Esq., C.E.	8	0 9	1106	..	47·08	..	..
	Kirby Malzeard (Bagwith Brae)	H. Shortreed, Esq., C.E.	5	0 9	703	..	44·35	227	164
	Kirby M. (Stone & Ears Wham.)	H. Shortreed, Esq., C.E.	8	0 9	1118	..	46·59	..	..
	EAST RIDING. (Area, 1,176 sq. mi.).								
	1.—OUSE—Left Bank Tributaries. 82 sq. mi.								
D	Osgodby (Fruit Testing Stn.)	J. W. Eves, Esq.	5	1 0	30	..	28·12	172	135
D	York (Heslington)	Hn. L. de Yarburgh-Bateson	8	1 0	39	..	30·16	208	145
D	York (Dunnington Hall)	Miss E. C. Hildyard	8	1 2	110	..	30·64	226	151
	2.—OUSE—Derwent. 248 sq. mi.								
D	Birdsall Gardens	Mr. J. Anderson	5	1 2	308	..	36·63	180	145
D	Westow Vicarage	Rev. G. T. W. Purchas	5	1 0	190	..	30·80	204	135
D	Rillington (Scampston Hall)	W. H. St. Quintin, Esq.	5	1 6	102	..	34·09	205	151
D	Ganton (Ganton Hall)	Harold Wrigley, Esq.	5	1 0	250	..	34·15	204	140
	3.—HUMBER—Left Bank Tributaries. 675 sq. mi.								
D	Spurn Head *new g*	The Meteorological Office	8	1 0	29	24·0	25·79	179	137
D	Patrington (Rose Cottage)	The Meteorological Office	5	1 3	46	23·3	25·63	164	128
D	Patrington Rectory	Rev. P. R. Frost	5	1 0	50	..	22·17	163	127
D	Hull (Pearson Park)	The Superintendent	5	0 10	8	25·4	27·87	205	135
D	Hull (Springhead)	W. D. Bingham, Esq.	5	1 0	16	..	30·06	210	137
D	Cottingham (Waterworks)	W. D. Bingham, Esq.	5	1 0	26	..	27·23	174	134
D	Holme-on-Spalding Moor	C. J. Pybus, Esq.	8	1 0	30	..	28·94	193	139
D	Beverley (E. Riding Mental Hosp.)	Medical Superintendent	5	1 0	175	..	29·34	194	134
	Beverley (New Walk)	W. Evans, Esq., C.E.	5	3 0	38	..	29·99	201	139
	Beverley (Hull Bridge)	W. Evans, Esq., C.E.	5	2 6	11	..	28·07	202	144
D	Market Weighton (Dalton Holme)	J. P. Jobling, Esq.	8	6 0	120	..	29·94	193	146
	Brandesburton (Hempholm Lk.)	W. Evans, Esq., C.E.	5	2 6	11	25·2	29·51	187	143
D	Driffield (Council School)	A. T. Jordan, Esq.	5	1 0	69	..	29·04	206	144
D	Lowthorpe (The Elms)	F. K. Hawes, Esq.	5	1 0	63	26·5	30·62	200	140
	4.—EAST COAST STREAMS. 171 sq. mi.								
D	Bridlington (Corpn. Nurseries)	S. R. Crofts, Esq.	5	1 0	60	..	33·07	203	143
D	Bridlington (Grammar School)	The Headmaster	8	1 0	76	..	32·17	190	140
w	Burton Fleming	C. B. Thomas, Esq.	5	0 4	128	..	35·09	..	..
D	Filey Vicarage	Rev. Canon A. N. Cooper	8	1 0	96	..	31·49	197	145
	NORTH RIDING. (Area, 2,155 sq. mi.).								
	1.—OUSE—Ure. 273 sq. mi.								
D	West Tanfield Rectory	Mr. H. H. Milman	5	1 0	150	28·7	39·00	202	155
D	Masham Moor (Roundhill Res.)	A. S. West, Esq., C.E.	8	1 0	743	37·6	50·84	241	184
	Masham Moor (Somerside)	H. Shortreed, Esq., C.E.	5	0 9	928	38·8	48·05	218	182
	Masham Moor (High Sour Mire)	H. Shortreed, Esq., C.E.	5	0 9	884	31·2	48·71	..	..
	Masham Moor (Leighton Res.)	H. Shortreed, Esq., C.E.	5	0 9	634	35·9	45·80	242	164
	Masham Moor (Towler Hill)	H. Shortreed, Esq., C.E.	8	0 9	820	36·7	44·81	238	169
	Masham Moor (Breary Bank)	H. Shortreed, Esq., C.E.	5	0 9	600	36·8	50·15	241	183
	Masham Moor (Healey Pasture)	H. Shortreed, Esq., C.E.	5	0 9	620	36·1	48·80	238	172
	Masham Moor (Low Houses)	H. Shortreed, Esq., C.E.	5	0 9	693	37·9	50·29	252	190

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	NORTH RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—OUSE—Ure—(*con.*).								
D	Clifton Castle Gardens	Lady Cowell	5	1 0	360	29·9	38·26	187	148
	Middleham (Cotescue)	A. Rowntree, Esq.	5	1 0	600	..	40·60?	197	143
D	Middleham (Castle Hill)	Col. P. H. Hammond, C.B.	5	1 0	470	31·7	41·61	211	150
D	West Burton (Flanders Hall)	G. T. Whitehead, Esq.	5	2 2	520	..	44·80	218	181
D	West Witton (Ivy House)	J. B. Espiner, Esq.	5	1 0	605	34·1	42·49	219	166
d	Leyburn (Spennithorne)	F. M. Curtis, Esq.	5	1 0	416	..	42·44	..	..
D	Leyburn (Bolton Hall)	Mr. F. Scrivener	8	1 0	420	32·6	44·77	218	165
	2.—OUSE—Swale. 569 sq. mi.								
D	Dalton Parsonage	Rev. G. H. Chilman	5	1 0	79	23·0	31·94	184	147
d	Coxwold (The Old Hall)	H. Geipel, Esq.	4	1 6	260	26·1	35·54	..	141
	Burniston (Camp Hill) (R)	Capt. F. H. Reynard	8	3 6	152	23·7	28·69	..	..
D	Thirsk (Sowerby)	Mrs. W. Brown	5	0 11	110	24·7	32·93	174	144
D	Thirsk (Brynkellhow)	A. B. Hall, Esq.	8	1 0	115	24·6	29·13	202	142
D	Thirsk (Stoneybrough)	T. J. Foggitt, Esq.	5	1 2	122	24·7	32·41	198	139
M	Felixkirk (Thirlby)	A. J. Walker, Esq.	5	1 0	339	27·1	38·43	..	..
D	Felixkirk (Mount St. John) (+A)	A. J. Walker, Esq.	5	1 0	541	25·8	39·37	211	151
D	Felixkirk (Mount St. John)	A. J. Walker, Esq.	5	1 0	541	26·5	38·70	210	151
D	Boltby (Ravensthorpe Manor)	F. E. Walker, Esq.	5	1 7	661	27·4	38·88	205	154
M	Boltby, East	A. J. Walker, Esq.	5	1 0	460	26·2	43·54	..	..
M	Boltby (High Paradise)	A. J. Walker, Esq.	5	1 3	1144	..	50·74	..	..
D	Bedale (The Hermitage)	C. Clarke, Esq., F.S.I.	5	0 10	465	..	34·96	185	150
D	Maunby Hall	Major A. Hill-Walker, V.C.	5	1 0	90	23·9	33·14	174	144
D	Bedale (Park House)	Miss M. Greenwood	5	1 1	180	25·6	34·27	191	140
D	Scruton Hall	A. Coore, Esq.	5	1 6	100	23·8	31·58	192	130
M	Swaledale (Gunnerside Lodge)	W. M. Christy, Esq.	5	1 0	900	47·8	(52·96)	..	..
D	Northallerton (Brompton)	J. P. Yeoman, Esq.	5	1 0	150	23·7	34·66	221	143
	Osmotherly (Oakdale W.W.)	The Surveyor, U.D.C.	5	1 0	600	..	44·76	..	..
D	East Harlsey (Harlsey Hall)	Mrs. Constantine	5	1 0	370	..	38·14	184	149
d	Richmond (C.E. School)	R. Hornby, Esq.	5	1 0	360	..	40·16	..	..
d	Reeth (Arkengarthdale)	Samuel Gott, Esq.	5	1 0	940	41·0	52·73	188	..
D	Rounton Grange	late Sir Hugh Bell, Bt.	8	0 9	249	25·6	35·37	206	139
W	Middleton Tyas	Mr. C. H. Butler	5	0 10	380	25·7	31·98	..	..
	3.—OUSE—Left Bank Tributaries. 153 sq. mi.								
D	York (Museum Gardens)	W. Watson, Esq.	5	1 0	57	24·3	29·96	194	133
d	Stockton-on-Forest (Stockton Hall)	Mrs. Lloyd	5	1 1	30	21·5	25·58	..	130
	Haxby (Moorlands)	E. G. Tew, Esq.	6	1 6	59	24·1	29·02	..	..
D	Crayke Rectory	Rev. T. Catton	5	1 0	370	..	30·54	169	124
	4.—OUSE—Derwent. 509 sq. mi.								
d	Welburn	R. Child, Esq.	5	1 0	190	26·1	32·92	..	..
D	Malton (Broughton Rise)	C. C. Laverack, Esq.	5	1 0	164	25·5	30·57	188	150
D	Terrington Rectory	Rev. J. S. Wimbush	8	1 0	250	..	31·43	192	136
D	Hovingham Hall	Capt. W. A. Worsley	5	0 9	119	29·0	35·05	201	153
D	Ampleforth College (*old site*)	The Procurator	5	1 0	350	27·2	32·33	179	136
D	Ampleforth College (*new site*)	The Procurator	5	1 0	313	..	36·67	189	145
D	Oswaldkirk (Layesthorpe Hall)	Major G. B. Foster	5	1 0	231	..	34·38	185	148
D	Helmsley (Boys' School)	E. W. Williams, Esq.	5	1 0	225	..	38·02	206	158
D	Pickering (Hungate Hall)	Dr. J. L. Kirk	5	3 0	90	26·8	33·16	192	150
D	Seamer (Irton Pump. Station)	H. Richardson, Esq., C.E.	8	1 0	94	28·7	33·40	172	132
d	Scarborough (Osgodby)	H. Richardson, Esq., C.E.	8	1 0	166	26·1	35·76	..	146
D	East Ayton (Derwent House)	A. H. Robinson, Esq.	5	1 0	110	27·0	35·36	186	144
d	Kirkby Moorside (Ravenswyke)	Harrison Holt, Esq.	5	1 0	270	27·2	33·40	..	137
D	Thornton Dale (High Dalby Ho.)	J. A. Coulson, Esq.	5	1 0	325	..	34·39	168	135
	5.—ESK & C. 278 sq. mi.								
D	Scarborough	Medical Officer of Health	5	1 1	118	25·8	32·61	198	135
D	Scarborough (Scalby)	Capt. W. H. L. Wordsworth	5	1 0	210	..	35·71	185	140
D	Scarborough (Scalby, St. Philips)	Rev. W. E. Stewart	5	1 0	130	26·1	32·47	187	129
D	Egton Bridge (Bridgeholme)	Lt.-Col. R. Astley Smith	5	1 0	150	33·3	51·93	184	157
D	Glaisdale (The Gables Gardens)	Mr. H. Hope	5	0 9	400	35·6	54·71	161	153
D	Sleights (The Hall)	P. M. Horsfall, Esq.	5	1 0	220	30·7	43·74	171	140
D	Danby (The School House)	J. W. Lynas, Esq.	5	1 0	500	35·2	52·45	199	158
D	Castleton	Miss M. H. Punch	5	1 0	425	..	51·92	204	151
D	Danby Lodge	Mr. C. Hardy	5	1 0	500	35·6	54·74	..	152

DIVISION IX—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	NORTH RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	5.—ESK & C.—(*con.*).								
D	Whitby (Park Hall, Aislaby)	Rev. J. H. Richardson	5	1 0	500	30·7	43·00	196	144
D	Whitby (Westthorpe)	Rev. M. A. C. Horsfall	6	1 6	120	..	33·73	201	147
D	Whitby (Mulgrave Castle)	Mr. J. Corbett	5	1 0	410	29·1	38·94	208	132
D	Guisborough (Lockwood Res.)	Cleveland Water Co.	8	1 0	632	33·0	48·47	243	159
D	Saltburn (Skelton Castle)	Col. W. H. A. Wharton	5	0 9	272	28·1	37·48	205	160
	6.—TEES. 373 sq. mi.								
D	Ingleby Manor	Lord DeL'Isle & Dudley	5	1 2	460	33·9	47·53	212	143
D	Kildale Hall	Major R. B. Turton	5	1 2	600	35·5	49·04	211	159
D	Crathorne Hall Gardens	J. L. Dugdale, Esq.	5	1 3	107	25·0	31·09	184	128
D	Barningham Park	Sir F. Milbank, Bart.	8	1 0	700	32·6	45·50	231	167
D	Nunthorpe (The Box)	G. D. Cochrane, Esq.	5	1 0	287	25·2	34·85	205	145
D	Marton-in-Cleveland (Southcroft)	R. Theodore Wilson, Esq.	5	0 11	100	..	32·82	173	139
D	Marton-in-Cleveland (Gartheen)	G. R. Collinson, Esq., C.E.	5	1 0	160	..	31·95	184	136
D	Middlesbrough (Albert Park)	R. Sutcliffe, Esq.	5	1 0	30	23·7	28·79	180	131
d	Middlesbrough (Dorman Mus.)	The Curator	5	..	30	23·3	27·97	..	..
M	Baldersdale (Aygill)	G. R. Collinson, Esq., C.E.	5	1 0	1250	45·0	56·00	..	..
D	Lartington Filters	G. R. Collinson, Esq., C.E.	5	1 0	725	..	38·77	210	173
M	Baldersdale (Blackton Res.)	G. R. Collinson, Esq., C.E.	5	1 0	937	40·5	(47·80)	..	..
M	Baldersdale (Balderhead)	G. R. Collinson, Esq., C.E.	5	1 0	1360	45·7	53·70	..	..
D	Baldersdale (Hury R.) *old g site*	G. R. Collinson, Esq., C.E.	5	1 0	866	36·0	40·40	228	181
D	Baldersdale (Hury R.) *new g site*	G. R. Collinson, Esq., C.E.	5	1 0	862	..	41·87	228	184
M	Lunedale (Dow Crag)	G. R. Collinson, Esq., C.E.	5	1 0	1720	56·0	70·30	..	..
M	Lunedale (Lunehead)	G. R. Collinson, Esq., C.E.	5	1 0	1450	55·6	61·50	..	..
M	Lunedale (Selset)	G. R. Collinson, Esq., C.E.	5	1 0	924	40·8	46·90	..	..
D	Lunedale (Grassholme Res.)	G. R. Collinson, Esq., C.E.	5	1 0	936	39·7	43·63	220	177
M	Lunedale (Keekham)	G. R. Collinson, Esq., C.E.	5	1 0	1660	59·5	68·10	..	..
M	Lunedale (Hargill)	G. R. Collinson, Esq., C.E.	5	1 0	1320	53·4	64·50	..	..

DIVISION X—NORTHERN COUNTIES.

DURHAM. (Area, 1,011 sq. mi.).

	1.—TEES & C. 396 sq. mi.								
D	Darlington (South Park)	T. J. Morrison, Esq.	5	1 0	150	27·1	31·33	217	142
D	Darlington (Broken Scar)	G. R. Collinson, Esq., C.E.	5	1 0	158	..	32·63	197	142
d	Darlington (Stanhope Road)	Rev. A. W. M. Close	5	1 0	180	27·2	33·40	(206)	(148)
d	Darlington (Fighting Cocks Res.)	G. R. Collinson, Esq., C.E.	5	1 0	150	..	29·17	..	..
d	Darlington (Hummersknott)	J. Short, Esq.	5	1 0	200	25·6	32·53	..	133
D	Egglescliffe	Capt. A. B. Hutton Wilson	8	1 2	100	24·0	31·97	191	137
D	Whorlton Vicarage	Rev. E. E. Gleaves	5	1 0	400	..	35·88	206	150
D	Piercebridge (Carlbury Hall)	J. H. Pease, Esq.	5	1 0	222	26·3	31·41	219	139
D	Gainford	H. L. Fife, Esq.	5	1 0	260	..	32·83	194	145
D	Barnard Castle (Bowes Museum)	S. E. Harrison, Esq.	6	1 0	500	30·4	39·49	228	161
D	Barnard Castle (County School)	C. W. Watson, Esq.	5	1 6	540	29·1	39·59	224	161
D	Long Newton Reservoir	G. R. Collinson, Esq., C.E.	5	1 0	184	..	30·81	208	138
D	Stockton-on-Tees (Hartburn Lo.)	C. Nielson, Esq.	5	0 10	45	24·4	28·61	199	138
D	Stockton-on-Tees (Ropner Park)	W. A. Jenkins, Esq.	5	1 9	61	22·9	26·20	175	124
d	Stockton-on-Tees (Billingham)	S. Ammonia & Nitrates, Ld.	5	1 6	35	..	27·50	..	..
D	Staindrop (Raby Castle) *old g*	Lord Barnard	5	1 0	450	..	37·66	231	156
D	Staindrop (Raby Castle) *new g*	Lord Barnard	5	1 0	450	..	37·09	223	150
d	Stillington Park	Messrs. Dorman, Long & Co. Ltd.	5	1 0	140	..	31·85	..	..
D	Eggleston House	The Headmaster	5	1 0	800	..	43·17	234	189
D	Middleton-in-Teesdale School	The Headmaster	5	1 0	740	..	44·93	194	169
D	Middleton-in-Teesdale (Newbiggin) *old g*	R. Coggins, Esq.	5	1 2	1000	40·9	55·05	225	196
D	Middleton-in-Teesdale (Newbiggin) *new g*	R. Coggins, Esq.	5	1 0	1000	..	54·77	224	196
D	Ferryhill (Winterton)	Medical Superintendent	5	1 0	365	26·6	36·41	189	159
D	Hurworth Burn (Crookfoot Res.)	J. R. Bradshaw, Esq.	10	1 6	296	25·4	28·22	212	128
D	West Hartlepool (Waterworks)	J. R. Bradshaw, Esq.	10	1 0	35	24·7	29·80	196	126
D	Hurworth Burn Reservoir	J. R. Bradshaw, Esq.	10	1 0	357	26·5	33·49	225	138
D	Hartlepool (Hart Reservoir)	J. R. Bradshaw, Esq.	10	1 0	172	..	28·14	202	139
M	Harwood Common (Yadmoss)	J. G. Collinson, Esq.	5	1 0	1800	..	(64·00)	..	..
d	Harwood (Bowes Close)	J. G. Collinson, Esq.	5	1 0	1500	..	59·67	..	..
D	Shotton (New Winning P. S.)	A. B. E. Blackburn, Esq., C.E.	8	1 0	402	29·4	35·27	215	145
D	Easington (Mill Hill Res.)	A. B. E. Blackburn, Esq., C.E.	8	1 0	521	..	35·43	232	153
D	Seaham (Dalton Pumping Sta.)	A. B. E. Blackburn, Esq., C.E.	8	1 0	345	27·0	35·62	215	153

DIVISION X—NORTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
DURHAM—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—WEAR. 464 sq. mi.								
Wolsingham (Dryderdale)	Mrs. Cranston	5	1 3	700	..	40·39	..	..
d Stanhope (Parson Byers Qy.)	Messrs. Dorman, Long & Co., Ltd.	5	6 8	846	31·7	44·09	..	148
M Burnhope (Grass Meres)	H. Robinson, Esq., C.E.	5	1 3	1850	59·1	58·20	..	..
M Burnhope (Lodgegill Mine)	H. Robinson, Esq., C.E.	5	1 3	1950	61·4	67·40	..	..
M Cowshill (Wellheads Hush)	H. Robinson, Esq., C.E.	5	1 6	1690	52·7	54·80	..	..
d Durham (Houghall Hort. Sta.)	County Education Com.	5	1 0	160	27·9	36·29	..	141
D Durham Observatory	F. Sargent, Esq.	8	1 0	336	24·6	34·88	202	145
D Weardale W.W. (Tunstall Res.)	H. Robinson, Esq., C.E.	8	1 2	724	32·4	(44·19)	225	179
D Ushaw (St. Cuthbert's College)	Rev. J. R. Adamson	5	1 0	594	28·2	35·35	194	150
M Weardale W.W. (Waskerley 6)	H. Robinson, Esq., C.E.	8	4 2	1229	..	(40·93)	..	..
M Weardale W.W. (Waskerley 3)	H. Robinson, Esq., C.E.	8	4 6	1433	..	(40·43)	..	..
D Weardale W.W. (Waskerley)	H. Robinson, Esq., C.E.	8	0 11	1179	33·1	42·11	230	175
M Weardale W.W. (Waskerley 1)	H. Robinson, Esq., C.E.	8	4 4	1317	..	(40·82)	..	..
D Consett (Crookhall)	H. Shackleton, Esq.	5	1 0	642	..	42·12	179	157
D Ryhope Pumping Station	A. B. E. Blackburn, Esq., C.E.	8	1 1	228	25·4	31·46	200	138
Washington School	V. Parkin, Esq.	5	1 2	160	..	30·62	..	..
D Sunderland (W. Hendon H.) No. 5.	Mrs. W. A. Mounsey	5	1 0	130	25·6	33·57	193	141
D Sunderland (Mowbray Pk.) (+A).	Dr. A. Stuart-Hebblethwaite	5	1 0	105	25·6	30·37	182	137
D Southwick Cemetery	J. Burdis, Esq.	8	1 0	171	..	35·85	176	136
3.—TYNE, LOWER. 151 sq. mi.								
D Weardale W.W. (Hisehope Res.)	H. Robinson, Esq., C.E.	5	1 0	1450	..	(43·85)	251	168
D Weardale W.W. (Smiddy Shaw)	H. Robinson, Esq., C.E.	8	1 3	1128	34·1	(43·05)	233	176
D Consett Park Farm	T. Hutton, Esq., C.E.	8	0 7	630	..	35·37	181	151
D Rowlands Gill (Chopwellwood)	Office of Woods	8	1 0	446	28·7	35·94	196	149
D Sunderland (Cleadon Pump. Stn.)	A. B. E. Blackburn, Esq., C.E.	8	1 0	216	24·4	27·87	184	131
D South Shields (Bent's Park)	Dr. W. Campbell Lyons	5	1 0	36	24·2	29·23	206	143
D South Shields (South Pier Wks.)	R. F. Hindmarsh, Esq., C.E.	5	1 0	17	..	23·06	167	124
NORTHUMBERLAND. (Area, 2,015 sq. mi.).								
1.—EDEN. 20 sq. mi.								
2.—SOUTH TYNE. 232 sq. mi.								
d Allenheads	J. W. Metcalfe, Esq.	8	1 0	1350	..	54·60	..	..
3.—TYNE, LOWER. 227 sq. mi.								
D Corbridge (Howden Dene)	T. D. Straker-Smith, Esq.	5	1 0	200	27·3	33·21	215	148
D Newcastle (Leazes Park)	W. J. Steele, Esq.	5	1 0	255	26·4	29·36	161	123
D Newcastle (Deaf & Dumb Inst.)	The Superintendent	5	1 8	201	27·2	28·47	171	133
D Newcastle (Wellburn, Jesmond)	J. H. Holmes, Esq., C.E.	5	1 3	163	26·8	30·10	163	137
D Hexham (Causey Hill)	R. W. Gregory, Esq.	5	1 2	430	..	30·77	206	151
d Hexham (Beaufront Castle)	The Lady Rayleigh	8	1 0	450	27·6	28·63	..	..
d Wallsend (Carville School)	G. R. Pattison, Esq.	5	1 3	100	..	27·80	..	..
D Tynemouth (Tyne Pier Works)	R. F. Hindmarsh, Esq., C.E.	5	1 0	54	25·1	26·83	177	131
D Tynemouth (C.G. Sta.) *new g.*	The Meteorological Office	8	1 0	67	26·1	29·15	198	137
D Whittle Dene Filters (N'stle W.W.)	A. Hardcastle, Esq., C.E.	5	1 1	353	26·6	32·16	230	144
D Whittle Dene Res. (Newc. W.W.)	A. Hardcastle, Esq., C.E.	5	0 6	380	25·3	31·94	224	146
4.—NORTH TYNE. 433 sq. mi.								
Ryal Cottage (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	10	0 9	463	29·1	33·07	..	..
Hallington Vill. (N'castle W.W.)	A. Hardcastle, Esq., C.E.	5	1 0	467	29·9	33·37	..	..
D Hallington Res. (N'castle W.W.)	A. Hardcastle, Esq., C.E.	5	1 0	470	29·2	34·11	213	158
Hallington (Fawcett) (Newc. W.W.)	A. Hardcastle, Esq., C.E.	5	1 2	537	28·2	32·91	..	..
Hallington (Cheviott) (Newc. W.W.)	A. Hardcastle, Esq., C.E.	5	1 2	576	27·8	31·68	..	..
Camphill (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	1 0	650	29·4	35·08	..	..
D Colt Crag Res. (N'castle W.W.)	A. Hardcastle, Esq., C.E.	5	1 0	654	28·2	33·94	208	179
Green Crag (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	1 0	900	30·1	37·01	..	..
D Falstone Rectory	Rev. A. J. Dexter	5	1 0	485	38·6	40·52	232	175
D Bellingham (High Green Man.)	Sir C. Morrison-Bell, Bt.	5	1 0	849	35·4	37·73	202	174
D Redewater (Catcleugh)	A. Hardcastle, Esq., C.E.	5	1 0	819	40·2	49·77	263	207
5.—COQUET & C. 840 sq. mi.								
Whittington (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	8	0 9	528	28·1	33·12	..	..
Burnside (Newcastle W.W.)	A. Hardcastle, Esq., C.E.	5	0 9	419	27·2	33·35	..	..
d Kirkwhelpington	J. R. Wardle, Esq.	5	1 3	581	..	35·08	..	..
D Morpeth (High Stanners)	R. Matheson, Esq., Jnr.	8	1 6	90	..	31·44	205	148
D*Ashington (Bothal School)	J. Gray, Esq.	5	8 0	110	25·3	28·74	184	131

* Formerly known as Morpeth (Ashington).

DIVISION X—NORTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	NORTHUMBERLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	5.—COQUET & C.—(*con.*).								
D	Morpeth (Cockle Park)	Northumberland Co. Council	8	1 0	325	29·3	32·49	187	137
D	Font Res. (Tynemouth W.W.)	J. W. McKerrow, Esq.	10	1 2	620	31·1	35·88	245	171
W	Long Framlington (Embleton H.)	J. C. Fenwick, Esq.	5	0 9	430	30·3	32·63	..	..
d	Acklington (Broomhill Colliery)	A. M. Morison, Esq.	5	1 0	92	24·9	27·91	..	..
D	Alnmouth (Nether Grange)	Miss E. Pease, J.P., O.B.E.	5	1 6	40	26·2	29·71	171	131
D	Howick Hall Gardens	The Rt. Hon. Earl Grey	8	0 10	121	28·2	32·88	194	147
D	Belford (Newlands)	C. H. Sanderson, Esq.	5	3 10	130	..	29·59	187	131
	6.—TWEED. 262 sq. mi.								
D	Glanton Pyke Gardens	Col. C. G. Collingwood, C.B.	8	4 2	521	29·4	33·30	211	156
D	Wooperton	Mrs. Burdon	6	1 6	..	30·0	36·92	190	158
d	Kirknewton (Coldburn)	Mrs. Cowe	5	0 10	700	42·4	45·82	..	..
D	Ilderton (Lilburn Tower)	Mr. W. Lovett	10	6 0	300	27·9	35·01	199	158
D	Ilderton (Lilburn Tower Gdns.)	Mr. W. Lovett	5	1 0	250	31·0	36·94	200	158
d	Wooler (Victoria House)	Miss E. M. Dodds	5	1 0	176	26·8	31·08	..	132
	Mindrum (Thornington House)	Leonard Briggs, Esq.	5	..	..	28·6	33·55	..	..
D	Berwick-on-Tweed (Ramparts)	S. Hill, Esq.	5	1 0	76	23·4	27·07	177	135
	7.—INSULAR. 1 sq. mi.								
	CUMBERLAND. (Area, 1,516 sq. mi.)								
	1.—EDEN & SOLWAY. 887 sq. mi.								
D	Ullswater (Hallsteads)	Mrs. F. Thomasson	5	1 0	497	..	65·17	212	188
D	Watermillock (Mell Fell House)	Mrs. Spring-Rice	5	1 6	970	..	59·55	219	181
D	Penrith (Hutton John)	F. Huddleston, Esq., C.E.	5	1 0	688	..	53·51	231	176
D	Penrith (Briar Cottage)	H. Lester, Esq.	5	1 0	575	32·8	37·75	201	152
D	Penrith (Laurel Bank)	A. B. Sinclair, Esq.	5	1 0	480	..	41·29	220	157
D	Penrith (Newton Rigg)	Cumberland County Council	8	1 0	560	36·4	47·59	223	170
D	Uldale (Chapel House Res.)	J. Strong, Esq.	8	1 0	620	..	49·51	223	192
D	Penrith (Nunwick Hall)	R.HeywoodThompson,Esq.	5	1 0	268	..	39·80	208	169
D	Penrith (Ennim)	Lt.Col.H.L.Riley,DSO,OBE.	5	1 0	660	..	48·80	206	172
D	Mealsgate (Quarry Hill)	J. R. Watters, Esq.	8	1 0	481	40·4	44·18	230	166
M	Allonby	W. H. Williamson, Esq., J.P.	5	1 0	25	..	32·65	..	..
D	Renwick (Ravenwood)	W. Salkeld, Esq.	5	1 0	750	..	51·55	230	206
D	Ainstable (Heather Glen)	A. Guthrie-Smith, Esq.	5	1 6	500	..	40·48	232	166
D	Wigton (Brookfield)	David W. Reed, Esq., B.Sc.	5	1 0	124	..	35·55	186	160
D	Wreay Vicarage	Rev. Canon A. R. Hall	5	1 0	310	*31·8*	36·17	230	161
d	Silloth	Miss A. P. Farries	5	1 0	27	..	39·97	..	..
D	Geltsdale	P. Dalton, Esq., C.E.	5	1 2	778	..	42·10	233	177
D	Carlisle (Spital Cemetery)	L. C. Collett, Esq.	8	1 0	114	31·8	35·24	219	156
	Carlisle (Denton Holme)	W. Eggleston, Esq.	5	1 0	57	..	33·91	..	..
D	Carlisle (Rose Hill)	Henry Lonsdale, Esq.	8	1 1	105	..	38·47	217	156
D	Carlisle (Scaleby Hall)	Lady Allison	5	1 0	111	33·7	38·89	221	164
	2.—DERWENT. 257 sq. mi.								
M	Sprinkling Tarn	The Meteorological Office	5	1 6	1985	..	(154·42)	..	..
M	Styehead Tarn	The Meteorological Office	5	1 6	1472	..	(152·39)	..	..
M	Stye Head B *old g*	The Meteorological Office	4	0 6	1077	..	(155·85)	..	..
M	Stye Head B *new g*	The Meteorological Office	5	1 6	1070	..	(167·89)	..	..
M	Borrowdale (Seathwaite)	The Meteorological Office	4	0 9	422	129·5	122·87	..	..
	Borrowdale (Seathwaite) garden	The Meteorological Office	5	1 6	423	..	130·33	..	..
M	Borrowdale (Seathwaite) *Field*	The Meteorological Office	5	1 0	423	..	(119·86)	..	..
M	Ullscarf	L. Holme Lewis, Esq., C.E.	5	1 0	2100	*115·1*	131·80	..	..
‡	Helvellyn (Birkside)	L. Holme Lewis, Esq., C.E.	5	1 0	1900	*80·4*	95·40	..	..
M	Wythburn	L. Holme Lewis, Esq., C.E.	5	1 0	610	..	109·40	..	..
D	Rosthwaite (The Moraine)	G. Scott, Esq.	5	1 0	330	..	109·25	222	203
‡	Armboth Fells (The Pewitts)	L. Holme Lewis, Esq., C.E.	5	1 0	1650	*82·9*	99·30	..	..
‡	Helvellyn (Whiteside)	L. Holme Lewis, Esq., C.E.	5	1 0	2100	*75·9*	94·80	..	..
D	Buttermere (Hassness)	E. Dixon, Esq.	6	1 0	350	..	108·44	235	212
M	Crummock Water (Llanthwaite Grn.)	R. W. Hall, Esq.	5	1 0	510	..	73·29	..	..
	Thirlmere (Dale Head Hall)	L. Holme Lewis, Esq., C.E.	6	1 0	620	*78·7*	93·40	..	..

‡ Gauge over-exposed on Moor.

DIVISION X—NORTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
		in.	*ft. in.*	*ft.*	*in.*	*in.*		
CUMBERLAND—(*con.*).								
2.—DERWENT—(*con.*).								
D Keswick (Lingholm Gardens)	J. Elson, Esq.	5	1 0	300	..	72·85	226	194
D Keswick (Derwent Island) *old g.*	C. E. Marshall, Esq.*	5	0 9	280	..	67·50	231	190
D Keswick (Derwent Island) *new g.*	C. E. Marshall, Esq.*	5	1 0	290	57·0	61·67	230	187
D Keswick (High Hill)	Urban District Council	5	1 0	254	..	58·49	216	177
D Portinscale (High Moss)	Mrs. J. E. Brown	5	1 0	285	..	66·69	222	180
D Keswick (Mirehouse)	Miss Spedding	5	1 6	280	..	56·83	221	175
d Workington (Stainburn Res.)	The Borough Surveyor	5	1 0	180	..	38·82	..	148
D Threlkeld (Blencathra Sanat.)	Dr. E. Garrigan	5	1 0	885	..	67·07	225	194
M Cockermouth (Castlegate Drive)	R. W. Hall, Esq.	5	1 0	268	..	40·75	..	..
Camerton Vicarage	Rev. E. C. Bennett	5	1 0	200	..	35·75	..	..
D Bassenthwaite (Higham)	G. F. Fisher, Esq.	5	0 9	500	..	46·09	214	183
3.—WEST COAST STREAMS. 235 sq. mi.								
D Ravenglass (The Grove)	Walter Marchant, Esq.	5	1 0	70	42·5	46·57	191	164
D Eskdale Green (Gatehouse)	Mr. E. Hayes	5	1 0	250	..	61·01	229	187
B Beckfoot (Eskdale Vicarage)	Mrs. F. K. Berry	5	1 0	169	..	72·24	244	202
Braystones	H. H. Watson, Esq.	10	3 6	36	..	41·11	..	..
M Egremont (Lank Rigg)	J. Sherwen, Esq.	5	1 0	1750	..	73·00	..	..
D St. Bees (Bickerley House)	Lt.-Col. G. Dixon	5	1 0	60	..	41·88	201	168
D Whitehaven (Stanley Pond)	WhitehavenCollieryCo.,Ltd.	12	2 11	45	..	49·60	186	156
D Whitehaven (Scragill Reservoir)	C. A. Wilson, Esq., C.E.	8	1 0	188	..	45·69	210	175
D Workington (Winscales House)	Miss E. W. Trench	5	1 6	440	..	36·42	206	155
4.—DUDDON & C. 50 sq. mi.								
5.—SOUTH TYNE. 87 sq. mi.								
D Alston Vicarage	Rev. N. A. Walton	5	1 0	940	..	52·73	228	187
WESTMORLAND. (Area, 783 sq. mi.)								
1.—EDEN. 373 sq. mi.								
D Kirkby Stephen (Eden Place)	Mrs. Paul Mason	5	1 0	544	42·3	47·43	223	176
Wasdale Pike	L. Holme Lewis, Esq., C.E.	5	1 0	1825	..	79·14	..	..
Mosedale (Mosedale Cottage)	L. Holme Lewis, Esq., C.E.	5	1 0	1443	..	97·91	..	..
Wet Sleddale (Mirethwaite)	L. Holme Lewis, Esq., C.E.	5	1 0	990	..	74·31	..	..
Blea Water	L. Holme Lewis, Esq., C.E.	5	1 0	1465	..	95·32	..	..
Mardale (Grove Brae)	L. Holme Lewis, Esq., C.E.	5	1 0	802	..	94·52	..	..
Shap (Birkbeck Fell)	L. Holme Lewis, Esq., C.E.	5	1 0	935	..	62·45	..	..
Swindale Parsonage	L. Holme Lewis, Esq., C.E.	5	1 0	875	..	82·18	..	..
Swindale Head	L. Holme Lewis, Esq., C.E.	5	1 0	1025	..	76·72	..	..
Grizedale (Ruthwaite Lodge)	M. Marshall, Esq.*	8	1 6	1250	..	112·56	..	..
Mardale (Low Raise)	L. Holme Lewis, Esq., C.E.	5	1 0	2465	..	91·73	..	..
Shap (Thornship Gill)	L. Holme Lewis, Esq., C.E.	5	1 0	865	..	65·60	..	..
Shap (Tailbert Head)	L. Holme Lewis, Esq., C.E.	5	1 0	1100	..	65·85	..	..
D Stainmore (Rampson) *new gauge*	Capt. T. W. Bracken	5	1 0	980	..	49·35	232	193
Hawes Water (Boulderstone Nab)	L. Holme Lewis, Esq., C.E.	8	1 0	744	..	70·25	..	..
Hawes Water (Naddle House)	L. Holme Lewis, Esq., C.E.	5	1 0	825	..	74·72	..	..
Hawes Water (Measand)	L. Holme Lewis, Esq., C.E.	5	1 0	824	..	83·85	..	..
Measand Beck (Keasgill)	L. Holme Lewis, Esq., C.E.	5	1 0	1862	..	68·63	..	..
Patterdale Hall	M. Marshall, Esq.*	5	1 3	490	86·4	99·11	214	..
d Patterdale (Greenside Mine)	Matthew Place, Esq.	7	1 6	1005	..	107·42	(237)	(221)
Bampton (Low Kop)	L. Holme Lewis, Esq., C.E.	5	1 0	1876	..	65·52	..	..
Bampton (Walmhow)	L. Holme Lewis, Esq., C.E.	5	1 0	615	..	56·48?	..	..
Bampton (Stanegarth)	L. Holme Lewis, Esq., C.E.	5	1 0	913	..	71·20	..	..
Cawdale Beck (Howe Grain)	L. Holme Lewis, Esq., C.E.	5	1 0	1642	..	76·17	..	..
Heltondale (Kidmoor)	L. Holme Lewis, Esq., C.E.	5	1 0	984	..	63·74	..	..
D Appleby (Castle Bank)	Lady Holmes	5	1 0	440	35·0	40·18	230	181
Ullswater (Sharrow Bay)	Mr. G. Robinson	5	1 0	600	..	59·26	..	..

* *Per* Miss Cordelia Marshall.

DIVISION X—NORTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in or more.
	WESTMORLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—EDEN—(*con.*).								
D	Morland	F. R. Markham, Esq.	5	1 0	455	..	44·43	206	159
	Morland Hall	W. G. Shorrock, Esq.	5	1 0	475	..	40·53	..	..
D	Penrith (Lowther Castle)	Mr. J. Jeffrey	5	1 0	760	37·2	50·05	226	176
D	Cliburn (Council School)	L. S. Chapman, Esq.	5	1 0	420	..	42·88	188	159
D	Penrith (Barton House)	Mrs. Legh Tolson	5	1 0	500	..	47·77	234	177
D	Temple Sowerby (The Grange)	Col. E. B. Burton	5	1 1	370	..	37·10	210	162
	2.—LEVEN. 60 sq. mi.								
D	Bowness (Dawstone)	W. H. Milne, Esq.	5	1 2	550	63·1	66·97	226	192
D	Windermere (Nurseries)	The Lakeland Nurseries, Ltd.	5	1 5	350	..	67·90	193	167
D	Windermere (Hammar Bank)	Mrs. H. Coutts	5	1 0	200	..	67·80	237	194
D	Windermere (Holehird)	H. L. Groves, Esq.	5	1 0	483	*72·7*	73·04	263	203
D	Windermere (Brockhole)	W. Gaddum, Esq.	5	1 6	175	..	68·12	231	195
D	Ambleside (Wansfell)	Miss Wrigley	8	1 0	150	..	74·28	223	199
M	Little Langdale (Fell Foot)	Miss C. Marshall	5	2 2	380	..	115·89	..	..
D	Ambleside (White Craggs)	C. H. Hough, Esq.	5	1 7	200	..	75·65	216	194
D	Ambleside (Market Square)	G. A. Johnston, Esq., M.D.	5	1 0	180	..	77·94	238	197
	Elterwater (Eltermere)	Miss C. Marshall	5	1 0	205	..	95·00	..	..
D	Rydal (The Stepping Stones)	Gordon G. Wordsworth, Esq.	5	1 3	190	*85·0*	84·82	244	214
D	Rydal	Miss M. Yates	5	0 7	390	..	84·72	242	205
D	Rydal (High Close)	F. E. T. Jones Balme, Esq.	8	0 9	553	83·3	86·68	234	200
D	Rydal (The Hall)	R. E. Porter, Esq.	5	1 0	354	..	85·04	243	209
	New Dungeon Ghyll Hotel	Miss C. Marshall	5	1 1	310	..	100·64	222	202
	Mickleden	Miss C. Marshall	5	1 6	490	..	120·25	..	..
D	Grasmere (The Wray)	Miss G. M. Simpson	5	1 0	221	88·5	94·07	253	210
	3.—KENT. 188 sq. mi.								
D	Burton (Under Fell)	J. B. Hoyle, Esq.	5	0 9	225	..	44·29	225	172
D	Meathop (Westmorland Sanator'm)	The Medical Superintendent	..	..	130	..	52·58	210	181
D	Heversham (Plumtree Hall)	Miss M. C. Watson	5	0 8	115	..	49·54	243	164
D	Levens (Beathwaite)	Robert Bush, Esq.	5	1 0	105	..	51·27	200	177
D	Killington Reservoir	F. G. T. Adams, Esq.	8	3 4	674	..	56·85	213	190
D	Kendal Gasworks	Kendal Gas & Water Co.	5	1 11	140	..	50·38	198	159
D	Kendal (Southfield)*	J. W. Braithwaite, Esq.	8	1 0	150	..	54·20	227	181
D	Kendal (Highgate)	R. Rhodes, Esq.	5	1 3	150	..	51·49	227	176
D	Kendal (Greenside)	Miss C. E. Wilson	5	1 0	380	..	57·67	223	176
D	Kendal (Ellergreen)	J. W. Cropper, Esq.	5	1 6	270	..	103·54	215	206
D	Kendal (Burneside)	W. E. Brown, Esq.	5	0 10	165	..	58·79	224	185
D	Kendal (Skelsmergh)	F. G. Linnell, Esq.	5	1 0	450	..	59·34	238	183
D	Kendal (Potter Fell)	J. Cropper & Co., Ltd.	5	2 0	750	..	90·88	196	174
D	Kentmere Head Reservoir	Mrs. Brocklebank	5	1 6	920	..	99·38	218	207
	4.—LUNE. 122 sq. mi.								
D	Kirkby Lonsdale (Stoop Lane)	Mrs. H. E. Hollins	5	1 8	210	..	51·00	195	168
	Kirkby Lonsdale	J. R. Picard, Esq.	7	1 0	215	..	50·37	..	..
D	Barbon Manor	Lord Shuttleworth	5	1 3	650	..	49·41	205	193
d	Barbon (The Stores)	W. Wilkinson, Esq.	5	1 0	310	..	51·53	..	..
	Ravenstonedale (Railway Station)	J. T. Sanderson, Esq.	5	1 0	800	..	57·01	..	..
	5.—TEES. 40 sq. mi.								
M	Lunedale (Conny Pot)	G. R. Collinson, Esq., C.E.	5	1 0	1840	..	59·50	..	..

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS.

MONMOUTH. (Area, 534 sq. mi.)

	1.—RHYMNEY. 39 sq. mi.								
d	Rumney (Witla Court)	Mr. E. Edwards	5	1 0	175	39·4	41·94	..	..
D	St. Mellons (Druidstone)	Mr. G. H. Shoebridge	5	1 0	200	..	43·53	205	161
d	Machen (Machen Quarry)	Machen Stone and Lime Co.	5	1 1	250	..	53·97	202	173

* Formerly known as Vicarage Terrace.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	MONMOUTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—EBBW. 88 sq. mi.								
D	Rogerstone (Rhiwderin)	Sir L. Forestier-Walker, K.B.E.	5	1 3	250	*44·0*	39·47	186	153
D	Blackwood	D. H. Price, Esq.	5	0 10	630	..	55·38	221	172
D	Abertillery (The Park)	S. E. Thomas, Esq.	5	1 0	700	57·2	66·68	234	188
d	Tredegar Laboratory	W. Morgan, Esq.	5	2 0	950	59·8	68·43	(225)	(188)
D	Ebbw Vale (Iron Works)	Works Manager.	8	1 0	902	56·6	65·02	195	173
	3.—USK & C. 290 sq. mi.								
D	Redwick	Lt.Col. Blethyn T. Rees, C.E.	5	1 3	24	..	34·06	188	154
D	Portskewett (Sudbrook)	S. W. Moore, Esq., C.E.	8	1 0	51	..	31·15	173	139
D	Newport (Stow Park)*	A. W. Jupp, Esq., C.E.	5	2 0	200	..	47·26	208	169
D	Newport (Alltyryn Hosp.)	Dr. J. Howard Jones, M.O.H.	8	1 0	265	..	49·04	198	162
D	Newport W.W. (Friar St. Yard)	Newport Corporation	5	6 0	32	..	43·91	199	158
D	Newport W.W. (Ynis-y-fro Res.)	Newport Corporation	5	1 0	136	..	48·98	223	169
D	Caerleon (The Croft)	B. T. Rees, Esq.	5	1 0	51	..	44·78	212	160
D	Newport W.W. (Pant-y-reos Res.)	Newport Corporation	5	1 0	435	..	55·95	223	166
D	Newport W.W. (Llanvaches)	Newport Corporation	5	0 10	456	..	42·50	205	156
D	Newport W.W. (Nantypridd)	Newport Corporation	5	1 0	500	..	46·63	211	164
D	Chepstow (Itton Court)	Lady Curre	5	1 0	390	..	44·05	201	163
D	Newport W.W. (Newchurch)	Newport Corporation	5	1 0	550	..	49·11	209	165
D	Usk (Monmouth Agric. Instn.)	The Principal	5	1 0	70	..	44·44	183	149
D	Abersychan (Glansychan)	G. W. James, Esq.	5	1 2	699	..	66·69	241	179
	Goytre (Goytre Hall)	Mrs. Lionel Whitehead, O.B.E.	5	1 0	300	46·1	56·91	190	163
D	Blaenavon (Estate Office)	E. J. John, Esq.	8	1 0	1150	55·1	67·87	173	159
D	Abergavenny (Plas Derwen)	Alan Whitehead, Esq.	5	1 3	200	..	51·72	231	163
D	Abergavenny (Ty Clyd)	F. D. Llewelyn, Esq.	5	1 0	272	45·1	53·38	202	163
D	Abergavenny (Richmond Road)	W. H. Edmunds, Esq.	8	1 0	217	40·6	47·29	190	150
D	Abergavenny (Larchfield)	Dr. N. R. Phillips	5	1 0	240	37·5	46·07	197	153
D	Abergavenny (The Chain)	Miss Baker-Gabb	5	1 0	310	..	47·67	205	159
D	Grwyne Fawr (Coed Dias)	Miss Baker-Gabb	5	1 0	900	..	52·38	236	186
	4.—WYE. 117 sq. mi.								
	GLAMORGAN. (Area, 808 sq. mi.)								
	1.—LOUGHOR. 55 sq. mi.								
D	Gorseinon (Penllergaer)	Sir C. Venables Llewelyn, Bt.	5	3 0	240	48·7	57·16	220	186
D	Felindre (Blaenant Dhu)	Lt.-Col. F. Hibbert, C.E.	5	1 3	346	..	66·59	231	201
D	Felindre (Lower Lliw Res.)	Lt.-Col. F. Hibbert, C.E.	8	1 3	426	..	61·16	232	191
D	Felindre (Upper Lliw Res.)	Lt.-Col. F. Hibbert, C.E.	8	1 3	599	..	72·18	239	199
	2.—GOWER PENINSULA. 62 sq. mi.								
D	Gower (Penrice Castle)	Mr. George Miller	5	1 11	12	..	54·82	201	181
d	Penmaen (Cefn Mor)	Mrs. R. A. Bostock	5	1 6	300	41·5	52·46	..	166
D	Sketty (Rhydyrhelyg)	E. H. Perkins, Esq.	5	1 0	124	46·0	59·95	235	190
	3.—TAWE. 47 sq. mi.								
D	Swansea (Victoria Park) (+A)	D. Bliss, Esq.	8	1 0	27	44·7	59·20	243	194
D	Clydach (Wernfadog) (R)	W. J. P. Player, Esq.	8	1 0	..	..	64·45	236	196
D	Ystalyfera (Wern House)	Miss L. Williams	5	1 6	240	64·8	80·57	209	194

* Gauge at Clytha Park until 18th June, 1930.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
GLAMORGAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NEATH. 82 sq. mi.								
D Briton Ferry (Brynsiriol)	H. A. Clarke, Esq., C.E.	5	1 0	33	..	56·79	216	188
D Briton Ferry (Cefn Court)	H. A. Clarke, Esq., C.E.	5	1 0	503	47·7	59·54	219	194
D Neath (Cimla Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	360	..	57·05	220	192
D Neath (Gnoll Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	204	..	57·50	216	178
D Neath (Farm School)	A. L. Brackney, Esq.	5	1 0	200	..	54·81	227	185
D Neath (Bryn-Teg)	H. P. Lloyd, Esq.	5	0 9	100	..	58·40	227	188
d Neath (Glynfelin)	T. Gibbins, Esq.	5	1 4	180	..	62·68	..	183
D Rhondda W.W.(Llyn Fawr Res.) (*old*)	Mr. J. B. Hughes	8	1 0	1220	88·6	101·16	244	205
D Rhondda W.W.(Llyn Fawr Res.) *new g*	Mr. J. B. Hughes	5	1 0	1220	..	(103·35)	(244)	(209)
Pontardawe (Plas Cilybebyll)	J. H. P. Lloyd, Esq.	5	1 3	500	..	76·08	..	..
5.—OGMORE & C. 350 sq. mi.								
Barry W.W. (Merthyr Dyfan R.)	T. E. Franklin, Esq., C.E.	5	1 0	300	37·6	40·80	..	..
Barry W. W. (Dinas Powis Res.)	T. E. Franklin, Esq., C.E.	5	1 0	165	36·4	39·08	..	..
Lower Penarth	E. I. Evans, Esq., C.E.	5	1 0	66	34·9	33·73	180	145
Penarth (Council Offices)	E. I. Evans, Esq., C.E.	5	5 0	160	37·1	35·72	193	150
D Dunraven Castle	J. P. Maitland, Esq.	5	1 0	80	..	43·12	220	167
D Cardiff (Cogan Pumping Statn.)	N. J. Peters, Esq., C.E.	5	1 0	121	37·7	40·33	197	161
D Cardiff (Ely Pumping Station)	N. J. Peters, Esq., C.E.	5	1 0	53	42·1	42·22	241	171
Barry W.W. (Pencoedtre Res.)	T. E. Franklin, Esq., C.E.	5	1 0	200	..	37·64	..	..
D Cardiff (St. Fagans Castle)	Capt. H. A. Pettigrew	5	0 10	100	48·5	49·04	197	169
D Cowbridge (Pentre Meyrick)	F. E. P. Dunn, Esq.	5	1 0	300	..	52·92	213	177
D Merthyr Mawr	Lt.-Col. J. I. D. Nicholl	5	1 6	75	42·9	54·52	264	202
D Bridgend (Eiw Graig)	H. J. Randall, Esq.	8	1 6	50	..	53·80	227	181
D Bridgend (Waterworks)	E. W. Davies, Esq.	5	1 0	140	..	54·45	199	172
Pencoed (Glan Ffrwd)	E. Tudor Owen, Esq.	8	3 6	77	..	60·57	213	167
Pencoed (Brynna)	E. W. Davies, Esq.	12	2 6	172	..	56·04	..	..
d Pencoed (Heol-y-Cyw Sch.)	W. Morgan-Richards, Esq.	5	1 0	330	..	54·24	..	..
D Port Talbot (Twyn-yr-hydd)	E. N. David, Esq.	5	1 3	180	42·6	53·28	221	179
D Port Talbot (Groeswen Ganol)	A. Bishop, Esq.	8	1 0	51	40·3	48·87	228	180
d Maesteg (Isolation Hospital)	Llewelyn C. Lloyd, Esq.	8	0 10	700	..	78·67	..	174
D Pontycymmer (Police Station)	Sergeant F. Mallin	8	1 0	560	..	86·79	210	195
D Pontycymmer (Garw Sec. Sch.)	J. J. Morgan, Esq.,	5	1 0	600	..	84·39	235	202
D Ogmore Vale	E. W. Davies, Esq.	8	0 6	600	..	89·74	232	196
6.—TAFF. 157 sq. mi.								
D Cardiff (Trade Street Depot)	N. J. Peters, Esq., C.E.	5	1 0	45	39·5	41·94	210	153
D Llandaff (West Hill)	J. E. Gladstone, Esq.	5	1 0	110	42·2	49·32	236	183
D Rhubina Reservoir	N. J. Peters, Esq., C.E.	5	1 0	336	48·1	53·15	218	180
D Pontypridd (Lan Wood R.) *new s.*	H. E. Maltby, Esq., C.E.	5	1 6	300	..	(65·75)	224	179
D Ystradyfodwg (Tyntyla Hos.)	J. D. Jenkins, Esq., M.D.	5	1 0	590	60·1	66·58	225	174
D Treorchy (Pumping Station)	E. Taylor, Esq.	5	1 0	518	..	71·94	225	188
D Treharris Service Reservoir	A. J. Marshall, Esq., C.E.	5	1 3	765	52·3	60·61	201	176
D Mountain Ash (Darranlas Res.)	W. G. Thomas, Esq., C.E.	5	0 11	540	63·0	72·79	216	178
D Mountain Ash (Maesydderwen)	W. N. Morgan, Esq.	5	1 0	483	56·6	(66·40)	207	165
D Treherbert (Tyn-y-waun) *old g*	O. Thomas, Esq.	5	1 0	801	87·0	101·96	247	203
‡D Treherbert (Tyn-y-waun) *new g*	O. Thomas, Esq.	5	1 0	801	..	(101·79)	(247)	(207)
*D Rhondda (Castell Nos. Res.)	H. E. Maltby, Esq., C.E.	5	1 6	1100	82·1	88·00	223	190
‡D Rhondda (Lluest Wen Filter)	H. E. Maltby, Esq., C.E.	5	1 6	1200	63·3	66·78	223	190
D Rhondda (Lluest Wen Res.)	H. E. Maltby, Esq., C.E.	5	1 6	1280	89·0	99·22	224	202
D Merthyr Tydfil (Penybryn Filters)	A. J. Marshall, Esq., C.E.	5	1 3	937	54·0	64·99	257	192
D Dowlais (Gwernllwyn)	C. C. Blower, Esq.	5	1 6	1071	51·4	63·90	224	182
D Dowlais (Garth Filter Beds)	A. C. Quiningborough, Esq.	5	1 0	1245	..	67·70	242	187
7.—RHYMNEY. 55 sq. mi.								
D Cardiff (Roath Park)	A. A. Pettigrew, Esq.	5	0 11	49	41·6	44·69	225	167
D Cardiff (Penylan) (+A)	R. M. F. Picken, Esq., M.D.	5	1 0	203	41·4	44·50	210	160
D Cardiff (Heath Filters)	N. J. Peters, Esq., C.E.	5	1 0	132	41·3	46·64	213	173
D Llanishen Reservoir	N. J. Peters, Esq., C.E.	5	1 0	155	39·4	42·49	201	160
D Lisvane Reservoir	N. J. Peters, Esq., C.E.	5	1 0	150	37·4	40·78	202	158
D Rhymney Bridge Reservoir	E.WatkinEdwards,Esq.,C.E.	8	0 6	1150	56·8	73·52	248	220

* Exposure unsatisfactory.

‡ Gauge surrounded by turf wall.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CARMARTHEN. (Area, 918 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TEIFI. 87 sq. mi.								
2.—TOWY & C. 715 sq. mi.								
D Carmarthen (The Friary)	Dr. L. M. Bowen-Jones	5	1 5	62	48·3	56·86	247	188
D Carmarthen (Model & Prac. Sch.)	C. W. Wilford, Esq.	5	1 5	65	..	56·07	238	190
D Llandilo (Dynevor Castle)	Lord Dynevor	8	1 0	202	53·2	61·33	239	199
D Llandilo (Bryneithen)	H. L. Puxley, Esq.	5	1 0	400	49·8	59·80	228	194
w Llyn-y-fan Fach (Waen Sychlwch)	R. C. Jones, Esq.	5	1 0	1647	83·2	116·16	..	..
D Llyn-y-fan Fach (Nant Coch)	R. C. Jones, Esq.	5	1 0	1172	74·5	94·93	217	193
w Llyn-y-fan Fach (Bua'r Llyn)	R. C. Jones, Esq.	5	1 0	1650	..	122·14	..	..
D Llyn-y-fan Fach (Troed-y-Foel)	R. C. Jones, Esq.	5	1 0	867	..	79·61	246	204
D Llanddeusant (Pontcrynfe)	J. Thomas, Esq.	5	1 0	323	55·6	67·22	240	188
D Abergorlech	S. L. Davies, Esq.	5	1 0	250	..	66·88	229	185
D Llandovery (Nantyrhogfaen)	D. T. M. Jones, Esq.	5	1 0	249	50·8	61·89	231	199
D Llanwrda	Mr. H. H. Matthews	5	2 6	498	57·5	65·67	244	205
3.—LOUGHOR & C. 104 sq. mi.								
D Llanelly (Old Market Yard)	G. Watkeys, Esq., C.E.	5	12 0	35	44·6	57·58	229	192
D Llanelly (Filter Beds)	G. Watkeys, Esq., C.E.	5	1 0	237	45·1	62·94	226	193
D Llanelly (Cwmlliedi W.W.) *new g.*	G. Watkeys, Esq., C.E.	5	1 1	240	..	63·64	231	194
D Llanelly (Upper Lliedi Res.) *new g.*	G. Watkeys, Esq., C.E.	5	0 11	290	..	65·99	234	203
w Llannon Res.	R. C. Jones, Esq.	5	1 0	860	..	72·15	..	..
4.—TAWE. 7 sq. mi.								
5. USK. 5 sq. mi.								
6.—WYE.								
PEMBROKE. (Area, 617 sq. mi.)								
1.—TEIFI. 37 sq. mi.								
2.—NEVERN & C. 91 sq. mi.								
3.—WEST COAST STREAMS. 82 sq. mi.								
4.—CLEDDAU & C. 407 sq. mi.								
d Pembroke (Stackpole Court)	Mr. F. G. Garlick	6	1 6	60	39·3	50·65	..	153
D Tenby (The Priory)	G. P. Webb, Esq.	8	0 10	87	40·9	50·71	213	177
D St. Ann's Head	The Meteorological Office	8	1 0	142	35·3	41·86	203	160
D Pembroke Dock (County School)	J. H. Garnett, Esq.	5	1 0	85	42·7	48·82	201	172
d Pembroke Dock (R.A.F.)	Air Ministry	8	1 0	90	..	49·77	..	..
d Milford Haven (Co. School)	F. L. Lowther, Esq.	5	12 0	150	..	43·25	..	..
D Saundersfoot (Hean Castle)	Lord Merthyr	5	1 0	206	36·3	48·53	197	174
D Narberth (Cwmderwen)	Mrs. Allen	5	1 0	300	..	56·25	223	189
Haverfordwest (Picton Castle)	Sir C. E. G. Philipps, Bt.	5	0 10	138	46·8	55·58	..	..
D Haverfordwest (Portfield)	J. W. Phillips, Esq.	5	1 0	250	44·8	54·12	233	179
D Haverfordwest (Grammar Sch.)	J. W. Phillips, Esq.	5	1 0	95	46·4	55·09	217	180
D Fishguard (Langton, Dwrbach)	J. C. Yorke, Esq.	5	1 0	320	45·4	47·05	250	189
CARDIGAN. (Area, 688 sq. mi.)								
1.—DOVEY. 20 sq. mi.								

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	CARDIGAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—YSTWYTH & C. 347 sq. mi.								
D	Llanafan (Crosswood Park)	The Earl of Lisburne	5	1 0	201	..	53·00	249	196
D	Yspytty-Ystwyth (Hafod)	T. J. Waddingham, Esq.	5	1 3	580	56·4	67·49	265	223
D	Aberystwyth (Corporation Yard)	Dr. A. Thomas	8	1 0	69	..	42·28	217	173
D	Aberystwyth (North Parade)	Dr. A. Thomas	8	2 6	16	..	42·60	225	175
D	Aberystwyth (Plant Breeding Stn.)	Prof. R. G. Stapledon	5	1 0	450	..	46·93	237	176
D	Elerch (Lletty-evan-hen)	Prof. R. G. Stapledon	5	1 0	900	..	51·66	224	188
	3.—TEIFI. 260 sq. mi.								
D	Cardigan (County School)	Dr. D. Rees	5	1 6	72	..	45·65	218	161
D	Lampeter (Falcondale)	Mr. A. R. Taylor	5	1 0	498	..	61·98	240	203
	Yspytty-Ystwyth (Dolgroes)	Mr. R. Roberts	5	1 0	780	..	(66·50)	..	..
	4.—TOWY. 46 sq. mi.								
d	Abergwesyn (Nantneuadd)	The Meteorological Office	5	1 0	1000	..	81·30	..	181
M	Tregaron (Maes-y-bettws)	The Meteorological Office	5	1 0	910	..	81·05	..	..
	5.—WYE. 15 sq. mi.								
M	Birmingham W.W. (Llyn Gynon)	J. W. Wilkinson, Esq., C.E.	5	1 0	1500	..	85·35	..	..
M	Birmingham W.W. (Bwlchyrhendre)	J. W. Wilkinson, Esq., C.E.	5	1 0	1585	..	84·80	..	..
M	Birmingham W.W. (Claerddu)	J. W. Wilkinson, Esq., C.E.	5	1 0	1470	..	90·05	..	..
M	Birmingham W.W. (Gwngu)	J. W. Wikinson, Esq., C.E.	5	1 0	1490	..	(79·20)	..	..
d	Birmingham W.W. (Abergwngu)	J. W. Wilkinson, Esq., C.E.	5	1 0	1150	..	(82·70)	..	197
M	Plynlimon	The Meteorological Office	5	1 0	1630	108·0	106·30	..	..
	BRECON. (Area, 733 sq. mi.)								
	1.—TOWY. 17 sq. mi.								
	2.—TAWE. 41 sq. mi.								
D	Ystradgynlais (Yniscedwyn Ho.)	G. Coleman, Esq.	5	0 9	232	65·2	72·18	226	196
D	Swansea W.W. (Nantyrwydd)	Lt.-Col. F. Hibbert, C.E.	5	0 10	908	90·8	87·56	256	218
	3.—NEATH. 48 sq. mi.								
D	Glyn Neath (P. Neath Vaughan)	Messrs. Curtis & Harvey, Ltd.	5	1 5	297	61·7	62·04	248	193
D	Ystradfellte Reservoir	D. M. Davies, Esq., C.E.	5	1 0	1147	85·4	92·34	238	203
	4.—TAFF. 48 sq. mi.								
D	Aberdare (Nanthir Reservoir)	O. Williams, Esq., C.E.	5	1 0	860	59·6	69·92	246	191
D	Taf Fechan (Pontsticill) No. 12	A. C. Quiningborough, Esq.	5	1 0	1031	..	65·48	249	198
M	Taf Fechan (Pontsticill West) 14	A. C. Quiningborough, Esq.	5	1 0	1254	..	67·50	..	..
D	Cardiff W.W. (Llwynon Res.)	N. J. Peters, Esq., C.E.	5	1 0	860	..	71·18	238	191
w	Cardiff W.W. (Troedyrhiw)	N. J. Peters, Esq., C.E.	5	1 0	860	63·6	72·34	..	..
D	Cardiff W.W. (Pont-ar-daf)	N. J. Peters, Esq., C.E.	5	1 0	850	64·8	75·99	238	193
w	Cardiff W.W. (Garw-nant)	N. J. Peters, Esq., C.E.	5	1 0	1100	67·1	78·09	..	..
w	Cardiff W.W. (Nant-Gwineu)	N. J. Peters, Esq., C.E.	5	1 0	1275	..	76·19	..	..
w	Cardiff W.W. (Nant-y-gou-garn)	N. J. Peters, Esq., C.E.	5	1 0	1300	72·0	83·15	..	..
D	Taf Fechan (Pentwyn Res. S.)	A. C. Quiningborough, Esq.	5	1 0	1120	..	77·80	250	199
	Taf Fechan (Pentwyn Res. N.)	A. C. Quiningborough, Esq.	5	1 0	1090	..	75·07	..	..
w	Cardiff W.W (Nant Goch)	N. J. Peters, Esq., C.E.	5	1 0	1300	55·8	71·12	..	..
w	Cardiff W.W. (Nant Ddu)	N. J. Peters, Esq., C.E.	5	1 0	1560	71·5	83·44	..	..
D	Cardiff W.W. (Cantreff R.) No. 2	N. J. Peters, Esq., C.E.	5	1 0	1120	*70·1*	81·24	245	201
‡w	Cardiff W.W. (Tyle Brith) No. 1	N. J. Peters, Esq., C.E.	5	1 0	2354	*73·2*	83·68	..	..
D	Cardiff W.W. (Beacons Res.) No. 6	N. J. Peters, Esq., C.E.	5	1 0	1340	*79·4*	85·88	248	204
w	Cardiff W.W. (Nant Penig) No. 3	N. J. Peters, Esq., C.E.	5	1 0	2000	*87·5*	98·63	..	..
w	Cardiff W.W. (Blaen Taf Fawr)**new g*	N. J. Peters, Esq., C.E.	5	1 0	1430	..	94·68	..	..
w	Cardiff W.W. (Blaen Taf Fawr)**old g*	N. J. Peters, Esq., C.E.	5	1 0	1430	..	84·73	..	..

* Formerly called Cardiff W.W. (Storey Arms). ‡ Gauge over-exposed on moor.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
BRECON—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TAFF—(*con.*).								
D Taf Fechan (Neuadd Rs.) No. 1	A. C. Quiningborough, Esq..	5	1 0	1462	*70·3*	84·17	260	218
D Taf Fechan (Neuadd Rs.) No. 1A	A. C. Quiningborough, Esq..	5	1 0	1423	..	94·07	261	218
D Taf Fechan (Neuadd Rs.) No. 4	A. C. Quiningborough, Esq..	5	1 0	1487	*82·7*	93·41	261	220
D Taf Fechan (Neuadd Rs.) No. 11	A. C. Quiningborough, Esq..	5	1 0	1524	68·3	78·82	259	212
D Taf Fechan (Neuadd Rs.) No. 11A	A. C. Quiningborough, Esq..	5	1 0	1520	..	93·05	261	216
M Taf Fechan (Neuadd Rs.) No. 2	A. C. Quiningborough, Esq..	5	1 0	1993	*72·7*	83·87	..	..
M Taf Fechan (Neuadd Rs.) No. 5	A. C. Quiningborough, Esq..	5	1 0	1515	*81·1*	89·75	..	..
M Taf Fechan (Neuadd Rs.) No. 10	A. C. Quiningborough, Esq..	5	1 0	1700	72·7	86·61	..	..
M Taf Fechan (Neuadd Rs.) No. 3	A. C. Quiningborough, Esq..	5	1 0	1843	60·6	98·89	..	..
M Taf Fechan (Neuadd Rs.) No. 7	A. C. Quiningborough, Esq..	5	1 0	2017	*81·1*	101·68	..	..
M Taf Fechan (Neuadd Rs.) No. 8	A. C. Quiningborough, Esq..	5	1 0	1723	*85·7*	92·85	..	..
M Taf Fechan (Neuadd Rs.) No. 8A	A. C. Quiningborough, Esq..	5	1 0	1780	..	86·94	..	..
M Taf Fechan (Neuadd Rs.) No. 6	A. C. Quiningborough, Esq..	5	1 0	2099	*92·4*	104·77	..	..
5.—RHYMNEY. 2 sq. mi.								
6.—EBBW. 7 sq. mi.								
D Ebbw Vale W.W. (Llangynidr) 1	P. I. Davies, Esq., C.E.....	5	1 0	1413	58·8	72·65	214	200
D Ebbw V. W.W.(Llangynidr) W 3	P. I. Davies, Esq., C.E.....	5	1 0	1468	..	73·22	214	200
D Ebbw V.N.W.2 (Llang'ndr) NW2	P. I. Davies, Esq., C.E.....	5	1 0	1471	..	70·64	214	200
D Ebbw Vale W.W. (Carno, S.)	P. I. Davies, Esq., C.E.....	5	1 0	1262	..	71·76	214	203
D Ebbw Vale W.W. (Carno, E.)	P. I. Davies, Esq., C.E.....	5	1 0	1391	..	70·18	214	201
D Ebbw Vale W.W. (Carno, W.)	P. I. Davies, Esq., C.E.....	5	1 0	1412	..	72·43	214	202
D Ebbw Vale W.W. (Carno, N.)	P. I. Davies, Esq., C.E.....	5	1 0	1491	..	69·59	214	200
7.—USK. 299 sq. mi.								
Torpantau (Darenfawr)	Newport Corporation.....	5	1 0	1172	..	75·67	..	..
Torpantau (Ynysposte)	Newport Corporation.....	5	1 0	741	..	71·74	..	..
Torpantau (Blaen-caer-fanell)	Newport Corporation.....	5	1 0	1584	..	73·99	..	..
D Talybont (Ffynonwen)	Newpor[illegible]orporation.....	5	1 0	610	..	73·10	228	176
Talybont (Pwll Ifor)	Newport Corporation.....	5	1 0	1224	..	71·31	..	..
D Talybont (Aberclydach)	G. Garnons Williams, Esq...	8	0 9	520	..	58·91	198	163
D Crickhowell Rectory	Rev. G. Roberts.....	5	1 0	320	..	48·29	208	172
D Crickhowell (Gwernvale)	E. Pirie Gordon, Esq.....	5	1 0	393	*41·5*	50·38	238	168
D Crickhowell (Glanusk Park)	Lord Glanusk.....	5	1 0	290	..	51·02	206	171
M Swansea W.W. (Cray Rs.) No. 2	Lt.-Col. F. Hibbert, C.E....	5	1 0	1019	..	94·61	..	..
D Swansea W.W.(Cray Rs.) No.1 (+A)	Lt.-Col. F. Hibbert, C.E...	5	1 0	1043	..	83·51	249	198
M Cray Post Office	The Meteorological Office..	5	1 0	930	..	83·55	..	..
D Talybont (Ashford)	J. Henderson, Esq.....	5	1 0	360	..	55·14	194	160
M Talybont (Cwy Parc)	Rev. D. W. G. Bartlett....	5	1 6	480	..	54·85	..	..
D Llanfrynach (Ty-mawr)	Miss M. D. de Winton.....	5	1 0	450	..	47·87	233	176
D Crickhowell (Dan-y-Parc)	R. G. C. C. Sandeman, Esq..	8	1 0	230	..	48·67	221	160
Crickhowell (Cwmdu Rectory)	Rev. W. A. Davies.....	5	1 0	430	..	(41·30)	..	..
M Crickhowell (Tal-y-maes)	The Meteorological Office..	5	1 0	1250	..	55·60	..	..
d Trecastle (Blaenau-hydfer)	The Meteorological Office ..	5	1 0	970	..	76·13	..	160
D Brecon (Tairbull School)	I. L. Price, Esq.....	5	1 0	660	52·0	68.45	238	198
D Brecon (Ffrwdgrech)	Capt. J. D. D. Evans.... .	8	1 1	570	..	55·11	192	151
d Brecon (Mount St. Sch. Gdns.)	W. T. Winstanley, Esq....	5	0 11	500	..	53·08	..	..
D Battle (Penoyre)	G. E. Weekes, Esq.....	5	1 0	830	..	56·89	246	209
D Black Mountains (Blaen-y-cwm)	J. F. Jupp, Esq., C.E.....	5	1 0	1423	..	67·72	239	199
D Black M. (Dam Site Grwyne Fawr)	J. F. Jupp, Esq., C.E.....	5	1 0	1620	..	68·52	236	191
M Upper Chapel (Tymawr)	Mrs. Probert.....	5	1 0	945	46·9	55·30	..	..

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	BRECON—(*con.*).		*in.*	*ft.*	*ft.*	*in.*	*in.*		
	8.—WYE. 271 sq. mi.								
D	Cathedine Rectory	The Meteorological Office ..	5	1 6	650	..	38·74	184	154
D	Llanfihangel-Talyllyn, Sur.-Capt. E. O. B. Carbery, R.N. (Rtd.)		5	1 3	650	..	46·21	226	171
D	Talgarth (Dan-y-garth)	F. Morgan, Esq.	5	1 0	400	*33·2*	35·67	199	155
D	Talgarth (Pontiwal Sanatorium)	Dr. H. E. Watson	5	0 10	500	..	37·14	245	187
M	Abergwesyn (Trallwn)	The Meteorological Office..	5	1 0	1000	..	89·43	..	..
M	Newbridge (Pengraig)	The Meteorological Office..	5	1 0	960	56·8	68·10	..	..
D	Newbridge (Llysdinam)	Sir C. Venables Llewelyn, Bt.	5	1 3	646	41·2	49·13	238	176
M	Birmingham W.W. (Cors-yr-hwch)	J. W. Wilkinson, Esq., C.E..	5	1 0	1775	..	101·05	..	..
M	Birmingham W.W. (Esgair Ceiliog)	J. W. Wilkinson, Esq., C.E..	5	1 0	1560	..	92·30	..	..
M	Birmingham W.W. (Llyn-Carw)	J. W. Wilkinson, Esq., C.E..	5	1 0	1775	..	94·72	..	..
M	Birmingham W.W. (Nant-y-car)	J. W. Wilkinson, Esq., C.E..	5	1 0	1545	..	93·15	..	..
M	Birmingham W.W. (Arban)	J. W. Wilkinson, Esq., C.E..	5	1 0	1500	..	(89·50)	..	..
M	Birmingham W.W. (Tyn-y-pant)	J. W. Wilkinson, Esq., C.E..	5	1 0	1320	63·2	(72·60)	..	..
M	Birmingham W.W. (Esgair Garthen)	J. W. Wilkinson, Esq., C.E..	5	1 0	1590	..	92·65	..	..
D	Birmingham W.W. (Elan Village)	J. W. Wilkinson, Esq., C.E..	5	1 0	700	..	67·99	237	193
	RADNOR. (Area, 474 sq. mi.)								
	1.—WYE. 424 sq. mi.								
D	Glasbury-on-Wye (Hampton Sc.)	D. W. Lloyd, Esq.	5	1 0	274	33·9	33·65	208	161
D	Builth (Cefndyrys)	Capt. E. A. Thomas	5	1 10	740	41·5	48·60	214	197
	Builth Rd. (St. John's Vicarage)	Rev. Canon J. L. Bryans..	5	1 0	550	41·9	46·96	234	175
M	New Radnor (Gryliss)	H. Langston, Esq.	5	1 0	1200	..	45·80	..	..
D	New Radnor (Harpton Crt. Gdns.)	Mr. C. W. Bowen	5	0 9	700	..	49·10	198	171
M	New Radnor	John Langston, Esq.	5	1 0	750	44·1	47·68	256	..
D	Llandrindod Wells	Rev. J. L. Herbert	5	1 0	712	39·3	48·72	230	174
D	Birmingham W.W. (Tyrmynydd)	J. W. Wilkinson, Esq., C.E..	5	1 0	832	62·1	71·38	255	192
D	Birmingham W.W. (Nantgwillt)	J. W. Wilkinson, Esq., C.E..	5	1 0	840	63·2	(71·13)	255	193
M	Birmingham W.W. (Dwfnant)	J. W. Wilkinson, Esq., C.E..	5	1 0	1050	67·8	79·05	..	..
M	Birmingham W.W. (Esgair Gader) 2	J. W. Wilkinson, Esq., C.E..	5	1 0	1500	68·9	(86·35)	..	..
M	Birmingham W.W. (Tynllidiart)	J. W. Wilkinson, Esq., C.E..	5	1 0	1006	..	76·10	..	..
d	Birmingham W.W. (Claerwen)	J. W. Wilkinson, Esq., C.E..	5	1 0	1250	65·2	(82·55)	..	205
D	Birmingham W. W. (Tynant)	J. W. Wilkinson, Esq., C.E..	5	1 0	1020	63·6	79·24	246	203
D	Rhayader (Penralley)	E. D. Prothero, Esq.	5	1 0	757	50·6	56·28	261	178
	Rhayader (East Street)	J. W. Wilkinson, Esq., C.E..	5	1 0	700	..	57·28	..	..
M	Birmingham W.W. (Ceriglwydion)	J. W. Wilkinson, Esq., C.E..	5	1 0	1710	74·8	(90·25)	..	..
M	Birmingham W.W. (Pen-y-gareg)	J. W. Wilkinson, Esq., C.E..	5	1 0	1500	55·2	63·85	..	..
M	Birmingham W.W. (Pen-y-gareg) 2	J. W. Wilkinson, Esq., C.E..	5	1 0	1540	43·9	67·45	..	..
M	Birmingham W.W. (Bryn Hir)	J. W. Wilkinson, Esq., C.E..	5	1 0	1470	..	(91·40)	..	..
M	Birmingham W.W. (Abercaethon)	J. W. Wilkinson, Esq., C.E..	5	1 0	1240	..	(82·70)	..	..
M	Birmingham W.W. (Calettwr)	J. W. Wilkinson, Esq., C.E..	5	1 0	1490	71·1	(96·24)	..	..
M	Birmingham W.W. (Figin) No. 2	J. W. Wilkinson, Esq., C.E..	5	1 0	1700	83·3	102·25	..	..
M	Birmingham W.W. (Aberhenllan)	J. W. Wilkinson, Esq., C.E..	5	1 0	1070	58·8	(78·77)	..	..
M	Llanbister (Llananno)	The Meteorological Office...	5	1 0	900	45·1	53·95	..	..
	2.—SEVERN—Right Bank Tributaries. 50 sq. mi.								
	MONTGOMERY. (Area, 797 sq. mi.)								
	1.—DOVEY. 120 sq. mi.								
	2.—YSTWYTH. 7 sq. mi.								
	3.—WYE. 37 sq. mi.								
D	Llangurig (Dernol)	The Meteorological Office..	5	1 0	870	61·5	66·97	227	214
	4.—SEVERN—Right Bank Tributaries. 154 sq. mi.								
D	Llanidloes (Llidiartywaen Sch.)	G. E. Edwards, Esq.	5	1 3	1150	..	51·27	259	183
D	Llandinam (Broneirion)	D. Humphreys, Esq.	5	1 3	450	..	43·60	195	176
d	Newtown (Penarth Weir)	L. M. & S. Rly.	8	1 0	321	35·0	43·04	..	..
D	Montgomery (Oakfield)	Dr. R. E. Game Phillips....	5	1 0	450	..	37·62	223	168

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
MONTGOMERY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5. SEVERN—Left Bank Tributaries. 479 sq. mi.								
d Trefeglwys	J. I. Wilson, Esq., for M.O..	5	1 0	350	..	49·53	..	158
D Berriew (Brithdir Hall)	Mrs. F. E. Marston	5	1 0	350	30·7	36·87	255	165
D Welshpool (County School)	John Ward, Esq.	5	1 0	254	30·1	36·58	198	160
D Welshpool (Fron Llwyd)	Lt.-Col. G. B. D. Harrison..	5	1 3	500	33·7	41·04	227	178
Garthbibio (Bwlch Tomlyd)	The Meteorological Office..	5	1 0	1200	71·0	84·90	..	..
D Llandysilio Rectory	Rev. H. G. Dickinson	5	1 0	250	..	36·39	197	149
D Lake Vyrnwy	J. E. Bradley, Esq.	5	0 7	770	54·0	69·54	195	190
Lake Vyrnwy (Bryn Gwyn)	Col. J. R. Davidson, C.E...	8	1 0	1311	..	69·38	..	..
D Lake Vyrnwy (Bank Cynon Isaf)	Col. J. R. Davidson, C.E...	8	1 0	750	55·3	66·69	237	196
Lake Vyrnwy (Ty Uchaf)	Col. J. R. Davidson, C.E...	8	1 0	860	..	69·10	..	..
Lake Vyrnwy (Heol-y-ffridd) 1	Col. J. R. Davidson, C.E...	8	1 0	913	..	80·72	..	..
Lake Vyrnwy (Heol-y-ffridd) 2	Col. J. R. Davidson, C.E...	8	1 0	830	..	77·85	..	..
Lake Vyrnwy (Tyn-y-ffridd)	Col. J. R. Davidson, C.E...	8	1 0	1010	..	70·44	..	..
Lake Vyrnwy (Lluestwen)	Col. J. R. Davidson, C.E...	8	1 0	1667	..	79·43	..	..
Lake Vyrnwy (Llwynrhiw)	Col. J. R. Davidson, C.E...	8	1 0	1428	..	89·10	..	..
Lake Vyrnwy (Craig-y-Gribin)	Col. J. R. Davidson, C.E...	8	1 0	1422	..	78·61	..	..
Lake Vyrnwy (Eunant Bridge)	Col. J. R. Davidson, C.E...	8	1 0	830	..	91·19	..	..
Lake Vyrnwy (Carreg Goch)	Col. J. R. Davidson, C.E...	8	1 0	1750	..	84·79	..	..
Lake Vyrnwy (Fawnog)	Col. J. R. Davidson, C.E...	8	1 0	1315	55·7	71·70	..	..
FLINT. (Area, 256 sq. mi.)								
1.—DEE. 198 sq. mi.								
D Hanmer (Gredington)	Lady Kenyon	5	1 0	300	30·4	37·15	202	166
D Overton (Fairleigh)	Dr. B. J. E. Wright	5	1 0	220	26·8	35·47	212	163
Buckley (Hawarden W.W.)	W. Simmons, Esq.	5	1 0	540	28·7	42·15	..	..
D Hawarden (County School)	C. F. Williams, Esq.	5	0 9	257	27·2	37·52	195	148
* D Mold (Alun County School)	W. Owen Hughes, Esq.	5	1 0	365	..	38·25	189	147
D Mold (Mount Pleasant)	R. F. Baker, Esq., C.E.	5	1 0	503	..	41·34	243	165
D Northop (Soughton Hall)	Sir John Bankes	5	1 0	418	32·1	42·90	204	168
D Cilcain (Cilcen Hall)	W. B. Yates, Esq., C.B.E. ..	5	1 0	650	29·7	39·41	214	162
D Connah's Quay (Mold Road)	R. F. Baker, Esq., C.E.	5	1 0	43	..	36·95	206	143
D Connah's Quay (Pengwladys)	R. F. Baker, Esq., C.E.	5	1 0	231	..	37·55	206	145
D Hawarden Bridge	Messrs. J. Summers & Sons.	8	1 3	22	24·3	34·68	186	146
D Sealand Aerodrome (+A)	The Meteorological Office..	8	1 0	16	26·0	34·38	194	142
D Mostyn Vicarage	late Rev. W. Vaughan-Jones	5	1 0	100	33·2	37·09	(202)	(150)
2.—CLWYD. 51 sq. mi.								
D Bodfari (Nantlys)	D. F. Pennant, Esq., D.L...	5	1 5	178	27·4	37·26	185	152
D St. Asaph (St. Beuno's Coll.)	The Procurator	5	1 0	479	..	37·64	198	156
Dyserth Castle	J. B. Price, Esq.	5	1 0	350	..	30·86?	..	..
D Rhyl (Sewage Works)	The Town Clerk	8	1 0	30	25·8	32·66	194	152
D Prestatyn	Town Clerk	5	1 0	17	..	35·51	182	149
3.—SEVERN—Left Bank Tributaries. 7 sq. mi.								
DENBIGH. (Area, 668 sq. mi.)								
1.—DEE. 278 sq. mi.								
Glynceiriog (Plas Nantyr)	C. B. C. Storey, Esq.	6	1 0	1450	..	60·42	..	..
D Chirk Castle Gardens	Lord Howard de Walden...	5	1 0	630	..	45·58	177	155
D Ruabon (Trevor Hall)	E. Lloyd Edwards, Esq....	5	1 0	500	30·9	46·17	182	165
d Wrexham W. W. (Ty Mawr Res.)	J. A. Davies, Esq.	5	0 9	805	*39·1*	49·32	(224)	(173)
D Wrexham W.W.(Pack Saddle Res.)	J. A. Davies, Esq.	5	0 9	376	32·0	43·25	224	168
d Wrexham W.W. (Cae Llwyd Res.).	J. A. Davies, Esq.	8	0 9	918	*41·1*	49·38	(224)	(173)
d Wrexham W.W. (Cae Llwyd Res.).	J. A. Davies, Esq.	5	0 9	918	*40·5*	49·46	(224)	(174)

* Gauge probably over sheltered.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	DENBIGH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—DEE—(*con.*).								
d	Brymbo (Pentre Broughton Schl.)	D. E. Rees, Esq.	5	1 0	680	..	34·29	..	..
d	Wrexham (Beechley Road)	O. L. Jones, Esq.	2	1 0	278	..	37·01	..	..
	Wrexham (Madeira Hill)	O. L. Jones, Esq.	5	1 0	281	..	37·24	..	..
D	Llanfihangel-glyn-myfyr	R. F. Baker, Esq., C.E.	5	1 0	898	..	56·91	193	186
D	R. Alwen (Alwen Filter House)	R. F. Baker, Esq., C.E.	5	1 0	1100	..	57·36	233	191
D	R. Alwen (Alwen Dam)	R. F. Baker, Esq., C.E.	5	1 0	1189	..	60·56	239	197
D	R. Alwen (Hafod-llan-isaf) No. 2.	R. F. Baker, Esq., C.E.	5	1 0	1172	39·2	50·86	231	184
D	R. Alwen (Hafod-llan-isaf) No. 3.	R. F. Baker, Esq., C.E.	5	1 0	1169	36·8	54·37	228	186
D	Gresford (Horsley Hall Gardens)	R. H. Crockford, Esq.	5	0 10	100	..	36·80	190	148
	Pentre Voelas (Nant Heilyn)	R. F. Baker, Esq., C.E.	5	1 0	1225	..	61·31	..	..
D	R. Brenig (Hafod-yr-Onen)	R. F. Baker, Esq., C.E.	5	1 0	1175	..	52·77	203	180
M	Nantglyn (Pant-y-maen)	R. F. Baker, Esq., C.E.	8	1 0	1320	..	62·41	..	..
M	Llyn Bran	R. F. Baker, Esq., C.E.	8	1 0	1428	..	61·95	..	..
	2.—CLWYD & C. 267 sq. mi.								
	Derwen (Ty Cerrig)	Edgar Billson, Esq.	5	1 0	1030	..	47·95	..	..
d	Clawdd-newydd No. 2	R. F. Baker, Esq., C.E.	5	1 0	983	..	46·34	..	159
	Ruthin (Corwen Road)	R. F. Baker, Esq., C.E.	5	1 0	234	..	41·22	..	..
D	Ruthin (Bwlch Tunnel)	R. F. Baker, Esq., C.E.	5	1 0	908	..	43·15	195	157
D	Llangynhafal (Plâs Dráw)	Major R. Bromhead	5	1 0	419	31·1	42·44	223	169
d	Gwytherin Council School	C. E. Jones, Esq.	5	1 1	730	50·1	52·50	..	..
D	Denbigh (Mental Hospital)	W. Barker, Esq.	4	1 0	316	..	40·40	210	166
D	Denbigh (Garn)	J. D. W. Griffith, Esq.	5	1 0	447	32·7	40·30	224	169
M	Llanefydd (Dolwen Res., S.)	O. P. Cronshaw, Esq.	5	1 0	600	..	41·55	..	..
M	Llanefydd (East)	O. P. Cronshaw, Esq.	5	1 0	570	..	39·66	..	..
D	Llanefydd (Plas Uchaf Res.)	O. P. Cronshaw, Esq.	5	1 0	485	..	42·81	238	171
D	Llanefydd (Glascoed Res.)	O. P. Cronshaw, Esq.	5	1 0	360	..	35·79	215	156
	St. Asaph (Wigfair) (R)	Col. H. C. Ll. Howard, C.M.G.	8	2 4	250	..	30·59	..	..
D	Abergele (Sea Road)	Sydney Wilson, Esq.	5	1 0	25	28·4	33·05	192	152
D	Colwyn Bay (Eirias Park)	W. J. Dunning, Esq., C.E.	5	1 0	81	..	37·07	194	147
	3.—CONWAY—4 sq. mi.								
D	Pentre Voelas (Voelas Hall)	Mr. T. N. Dickie	5	1 3	640	..	66·52	229	197
D	Bettws-y-Coed (Rhydycrena)	Mrs. G. Bovill	5	1 0	50	..	59·44	234	186
	4.—SEVERN—Left Bank Tributaries. 47 sq. mi.								
D	Llansilin (Penygwely Res.)	G. W. Lacey, Esq., C.E.	5	1 0	1095	..	47·36	212	175
	MERIONETH. (Area, 661 sq. mi.)								
	1.—DEE. 218 sq. mi.								
D	Llanuwchllyn	O. L. Jones Esq.	5	1 0	550	..	79·70	241	209
D	Bala (Eryl Aran)	Mrs. Burton	8	1 0	600	54·6	73·63	226	197
D	Llanderfel (Pale Gardens)	Mr. E. Sturgess	8	1 0	606	48·2	61·49	228	183
	Trawsfynydd (Cwm Prysor)	N. Wales Power Co., Ltd.	5	1 0	1290	..	92·29	..	..
D	Corwen (Rûg Gardens)	Col. R. Vaughan Wynn	8	1 2	600	36·2	48·53	205	176
W	Derwen (Minffordd)	R. F. Baker, Esq., C.E.	5	1 0	971	..	51·72	..	..
	2.—CLWYD. 7 sq. mi.								
	3.—GLASLYN. 92 sq. mi.								
	Trawsfynydd (Tyn Twll)	N. Wales Power Co., Ltd.	5	1 3	750	..	90·20	..	..
D	Minffordd (Hafod-Cae-Maen)	G. H. C. Haigh, Esq.	5	1 0	100	50·5	62·14	252	205
D‡	Tan-y-bwlch (Gelligrin)	J. Roberts, Esq.	5	1 0	24	..	59·34	241	195
D	Tan-y-bwlch (Plas Gardens)	Mr. F. W. Dawe	5	1 0	55	..	72·25	230	193
D	Tan-y-bwlch (Dol-y-Moch)	Mrs. Howland Jackson	5	1 0	55	..	78·16	231	201
D	Festiniog (Hafod Fawr)	Office of Woods	8	1 0	900	74·6	88.00	221	209
d	Blaenau Festiniog (Oakeley Q.)	J. Lloyd Humphreys, Esq.	5	1 0	1100	97·1	113·84	(224)	(207)
D	Blaenau Festiniog (Llechwedd Q.)	Messrs. J. W. Greaves & Sons	5	1 0	700	..	118·68	272	230

‡ Gauge over-exposed.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
MERIONETH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—MAWDDACH & C. 262 sq. mi.								
D Towyn (Ynys-y-Maengwyn)	R. Corbett, Esq.	5	1 0	14	..	52·32	224	185
D Towyn (Bronffynnon) *new g*	Dr. T. Henry Jones	5	1 0	180	..	(50·35)	(242)	(181)
D Towyn (Peniarth)	Mrs. Wynne	8	1 0	25	..	62·57	224	200
D Tal-y-llyn Rectory	Rev. J. Pryce Jones	5	1 0	280	..	83·97	218	198
D Dolgelly (Dol'rhyd)	Col. P. H. Enthoven, D.L.	5	1 0	150	..	71·48	225	201
D Dolgelly (Bryntirion)	E. P. Beale, Esq.	5	0 10	50	58·8	73·34	246	208
D Trawsfynydd Camp	E. Jones, Esq.	5	1 0	800	67·0	73·84?	224	199
5.—DOVEY. 82 sq. mi.								
D Aberdovey (Plas Penhelig)	J. M. Howell, Esq., D.L.	5	1 0	120	..	52·13	205	174
D Pennal (Talgarth Hall)	Owen D. Jones, Esq.	5	0 9	125	..	70·23	252	203
6.—SEVERN—Left Bank Tributaries.								
CARNARVON. (Area, 572 sq. mi.)								
1.—BARDSEY ISLAND.								
2.—CONWAY & C. 146 sq. mi.								
Lake Cowlyd (Llethyr Gwyn) c	C. F. Farrington, Esq., C.E.	5	1 0	1700	..	110·20	219	..
L. Cowlyd (Ffrith Carreg Wen) AC	F. Farrington, Esq., C.E.	5	1 0	1168	..	98·42	219	..
d Trefriw Wells	C. P. Adamson, Esq.	5	1 0	25	..	63·39	(220)	(173)
D Lake Eigiau (Dam Site) (+A)	N. Wales Power Co., Ltd.	5	1 5	1244	83·9	90.72	245	195
Llanbedr-y-Cennin (Melynllyn)	W. T. Ward, Esq., C.E.	5	1 0	2065	..	(146·30)	..	..
Llanbedr-y-Cennin (Llyndulyn) *old g*	W. T. Ward, Esq., C.E.	8	1 6	1632	..	111·44	..	..
Llanbedr-y-Cennin (Llyndulyn) *new g*	W. T. Ward, Esq., C.E.	8	1 0	1632	..	118·97	..	..
w Llanbedr-y-Cennin (Plasdulyn)	W. T. Ward, Esq., C.E.	8	1 0	509	..	70·31	..	..
D Tyn-y-Groes (Dolcrwm)	R. S. Fisher, Esq.	5	1 0	100	..	59·17	224	179
D Tyn-y-Groes (Roe Wen)	Albert Wilson, Esq.	5	1 0	140	..	58·37	233	179
D Conway (Castle Bank)	Ministry of Agric. & Fisheries	5	1 0	50	..	37·66	194	151
Deganwy (Y Berlfa)	Willoughby Gardner, Esq.	5	1 0	35	..	38·34	..	..
d Llandudno (Glanwydden School)	Thomas Roberts, Esq.	5	1 0	28	28·7	38·20	..	..
D Llandudno	E. R. Williams, Esq.	5	1 0	13	30·0	34·67	207	145
3.—MENAI STRAITS. 221 sq. mi.								
d Edeyrn Tydweiliog (Cefnamwlch)	W. H. Stark, Esq.	5	1 0	300	..	53·51	191	172
D Madryn Castle (Farm School)	J. Hines, Esq.	5	1 0	278	39·0	49·29	215	186
d Llanaelhaearn (Cl. School)	J. Hughes, Esq.	5	1 0	300	51·6	57·55	..	..
Nantlle (Dorothea Quarries)	W. J. Griffith, Esq.	8	60 0	350	..	72 42	..	..
Llandwrog (Glynllivon Park)	Hon. F. G. Wynn	5	1 0	100	44·7	51·96	..	..
D Llandwrog (Glynllivon Nursery)	Hon. F. G. Wynn	5	1 0	180	..	53·87	216	173
Llandwrog (Glynllivon Garden)	Hon. F. G. Wynn	5	1 0	100	..	54·42	245	182
Llandwrog (Glynllivon Fort)	Hon. F. G. Wynn	5	1 0	180	..	56·98	216	179
D Bettws Garmon	Rev. T. C. V. Bastow	5	1 0	414	64·4	79·48	232	200
M Lake Ogwen	R. Hughes, Esq.	5	1 0	1006	..	126·10	..	..
Carnarvon (Belan Fort)	Hon. F. G. Wynn	5	1 0	26	33·9	42·50	..	..
D Llanbeblig (Cefn Rhos)	Miss A.Preece	8	1 0	..	..	49·11	228	181
D Llanberis (Llandinorwig School)	John Roberts, Esq.	5	0 10	850	59·4	78·09	..	..
D Bethesda (St. Ann's Vicarage)	Rev. Canon W. Morgan	5	1 6	500	59·8	71·02	251	194
D Bethesda (Penrhyn Quarries)	A. H. Richards, Esq.	8	1 0	527	65·8	75·84	228	201
D Bangor (Town Hall)	Water Engineer & Surveyor.	8	1 6	50	..	45·18	187	176
D Bangor (Penrhyn Castle Gdns.)	Mr. J. Kneller	5	1 0	150	..	45·55	211	181
D Aber (University Coll. Farm)	Prof. R. G. White	5	1 0	80	..	(47·54)	(219)	(163)
D Llanfairfechan (Cae Cawr)	W. Timmins, Esq.	5	1 0	400	..	45·37	201	165
Penmaenmawr (Mountain)	J. Parry Hughes, Esq.	5	1 6	1100	..	57·62	..	..
D Penmaenmawr (Glan-y-Coed)	W. H. Brady, Esq.	5	1 6	100	..	47·72	201	181

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	CARNARVON—(*con*).		*ins.*	*ft. ins.*	*ft.*	*ins.*	*ins.*		
	4.—ERCH & C. 155 sq. mi.								
D	Abersoch	Lady Winterbotham	8	1 0	100	44·3	49·79	239	183
	Pwllheli (Bodfean Hall)	Hon. F. G. Wynn	5	1 0	155	43·7	53·41	..	..
D	Pwllheli (Bodfean Hall Gdns.)	Hon. F. G. Wynn	5	3 9	155	43·2	52·51	199	180
	5.—GLASLYN 50 sq. mi.								
D	Portmadoc (Wern)	R. M. Greaves, Esq.	5	1 0	90	..	61·67	246	204
d	Beddgelert (Co. School)	D. Jones, Esq.	5	1 2	133	..	99·38	..	..
	Snowdon (Wenallt) No. 6	N. Wales Power Co., Ltd.	5	1 2	1050	..	155·65	..	..
D	Snowdon (Cwm Dyli) No. 11	N. Wales Power Co., Ltd.	5	1 0	310	117·9	142·09	256	228
	Snowdon (Cwm Dyli, Old Rd.) 14	N. Wales Power Co., Ltd.	5	0 10	3258	..	133·96	..	..
	Snowdon (Llewedd) No. 2	N. Wales Power Co., Ltd.	5	1 3	1485	..	129·77	..	..
M	Snowdon (Delta) No. 7	N. Wales Power Co., Ltd.	5	1 0	1435	..	187·70	..	..
M	Snowdon (Glaslyn) No. 3	N. Wales Power Co., Ltd.	5	0 8	2050	..	167·35	..	..
M	Snowdon (Teryn) No. 1	N. Wales Power Co., Ltd.	5	1 0	1080	..	159·95	..	..
d	Snowdon (Llydaw Intake) No. 10	N. Wales Power Co., Ltd.	5	1 0	1480	..	158·23	(244)	(224)
d	Snowdon (L. Llydaw Copper M.) 9	N. Wales Power Co., Ltd.	5	1 5	1480	..	181·34	..	..
M	Snowdon (Llyn Llydaw) No. 5	N. Wales Power Co., Ltd.	5	1 0	1470	..	147·45	..	..
M	Snowdon (Crib Goch) No. 8	N. Wales Power Co., Ltd.	5	1 3	2340	..	189·70	..	..
	ANGLESEY. (Area, 275 sq. mi.)								
D	Bryn-siencyn (Trefarthen)	Miss E. Meyrick	5	1 0	30	..	41·97	192	160
D	Llangadwaladr (Bodorgan)	Mr. W. Pilgrim	5	1 0	100	37·5	45·38	232	172
	Llanfaelog	H. S. Lowe, Esq., J.P.	5	1 0	50	32·0	37·79	..	..
D	Plas Cadnant	Major T. Fanning Evans ..	5	1 0	156	..	48·36	209	177
D	Llangefni (Fronheulog)	A. H. Withinshaw, Esq.	5	1 0	125	..	44·34	181	164
d	Llansadwrn (Treffos)	C. Panton Vivian, Esq	..	..	318	..	46·30	..	..
	Beaumaris (Fryars)	(R) Mrs. Burton	10	2 0	20	37·4	42·63	..	..
D	Llangwllog (Trescawen)	Mrs. Pritchard-Rayner	5	1 0	239	42·2	50·50	231	192
D	Bodedern (Presaddfed)	Lt.-Col. W. A. Fox-Pitt	5	1 0	150	38·9	47·68	242	193
	Holyhead (Soldiers Point)	A. Pearson, Esq.	..	..	..	..	40·85	..	..
D	Holyhead (Salt Island) (+A)	The Meteorological Office	8	1 0	26	34·8	41·46	219	160
D	Llanerchymedd Llwydiarth Esgb.	Miss J. E. Prichard	5	1 0	175	38·1	46·34	226	175
D	Penrhoslligwy School	T. Rowlands, Esq.	5	1 0	140	39·9	45·77	204	181
D	Lligwy	Lord Boston	6	1 0	170	34·6	39·50	174	149
D	Amlwch (Dyffryn Adda)	Major T. Fanning Evans	5	1 3	178	36·3	43·53	222	161
	ISLE OF MAN. (Area, 227 sq. mi.)								
	Castletown (Langness)	Com'rs. of N. Lighth's.	5	1 9	38	..	32·17	..	..
D	Port St. Mary (Beach Villa)	C. F. Butterworth, Esq.	5	3 0	40	..	30·58	181	145
	Santan Vicarage	Rev. R. Jones	5	1 0	245	..	42·24	200	166
D	Douglas (Borough Cemetery)	H. A. Bridge, Esq.	8	1 0	284	41·2	53·16	229	176
D	Douglas (Clypse Res., Onchan)	T. C. Greenfield, Esq, C.E.	8	1 0	440	43·9	54·60	242	170
D	West Baldwin Reservoir *old g*	T. C. Greenfield, Esq., C.E.	8	1 0	480	..	62·50	234	193
D	West Baldwin Reservoir *new g*	T. C. Greenfield, Esq., C.E.	5	1 0	470	..	66·66	234	191
	Maughold Head	Com'rs. of N. Lighth's.	5	0 6	230	..	37·51	174	164
D	Ramsey (Town Hall)	The Town Surveyor	8	21 0	18	..	56·49	197	151
D	Ramsey (North Promenade)	The Town Surveyor	5	1 0	15	..	55·90	198	148
	CHANNEL ISLANDS. (Area, 76 sq. mi.)								
	JERSEY. 45 sq. mi.								
D	Pontac	Mrs. E. G. Barnes*	5	1 6	30	..	40·50	212	174
D	St. Saviours (Petit Menage)	G. T. Robin, Esq.	5	0 10	30	..	44·18	216	180
D	Grouville	L. de Carteret Malet, Esq.*	5	1 6	70	..	45·16	198	168
D	St. Helier (Harbour Office)	The Greffier	8	0 10	28	..	42·47	200	161
D	St. Helier (St. Louis O.) *new*	Rev. C. Burdo, S.J.	8	1 5	180	31·9	43·14	206	163
D	St. Brelade (La Sergenté)	J. E. Le Boutillier, Esq.	5	1 4	194	..	40·16	206	158
D	St. Aubins (Belle Vue)	C. J. Sumner, Esq.	5	1 2	220	..	43·14	211	165
D	St. Lawrence (Little Grove)	R. E. B. Voisin, Esq.	5	1 0	60	..	46·58	197	168
D	Millbrook (St. Helier W.W.)	A. J. Jenkins, Esq. C.E.	5	0 11	53	..	47·00	195	168
D	St. Ouen's Manor	R. Malet de Carteret, Esq.	5	2 6	270	..	42·91	198	160
D	Trinity Rectory	Rev. S. J. Gruchy	5	1 0	375	..	40·23	207	158

* *Per* A. J. Jenkins, Esq.

DIVISION XI—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CHANNEL ISLANDS—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
GUERNSEY. 25 sq. mi..								
D St. Peter in the Wood (Hawthorns)	L. J. Nicolle, Esq.	5	1 0	100	..	34·45	203	149
D St. Martin's (Les Blanches)	B. T. Rowswell, Esq.	5	1 0	309	..	39·31	216	153
D St. Martin's (Hatnez)	A. A. Allain, Esq., C.E.	5	0 8	336	..	39·16	205	150
d Fort Road (La Cotte)	Major S. Carey Curtis	5	1 0	285	..	(41·33)	..	..
D Villiaze	A. A. Allain, Esq., C.E.	5	0 6	302	..	41·79	203	152
D St. Andrew (Vauxbelets Col.)	The Director	5	1 5	260	..	37·45	190	139
D St. Peter Port (Grange Road)	H. Vere Miles, Esq.	5	1 0	175	33·2	45·05	214	162
D St. Peter Port (Market Street)	B. T. Rowswell, Esq.	5	52 8	99	..	42·48	205	155
D Castel (King's Mills)	A. A. Allain, Esq., C.E.	5	2 0	47	..	39·98	196	153
D Rohais (Colborne Villa)	T. J. Guilbert, Esq., C.E.	5	1 0	116	..	41·34	215	154
D Menheniot Vineries	Major H. Roper	5	1 1	97	..	44·04	205	155
D L'Ancresse (Doyle Pavilion)	H. Vere Miles, Esq.	5	1 0	40	..	39·24	190	150
SARK. 2 sq. mi.								
D Pointe Robert	B. T. Rowswell, Esq.	5	1 0	214	..	35·93	207	167
HERM. 1 sq. mi.								
D Herm	Sir Percival Perry	5	1 3	8	..	36·23	201	125
ALDERNEY, 3 sq. mi.								
D St. Anne (Gros Nez House)	B. T. Rowswell, Esq.	5	1 6	214	..	37·61	182	150

SCOTLAND.

DIVISION XII—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WIGTOWN. ((Area, 488 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—LOCH RYAN. 46 sq. mi.								
D Castle Kennedy (Lochinch)	Earl of Stair	8	1 0	85	..	47·44	196	175
Loch Ryan Lighthouse	Com'rs. of N. Lighthouses	5	1 3	10	..	43·24	162	152
2.—WESTERN GALLOWAY, 44 sq. mi.								
D Logan House	K. McDouall, Esq.	8	1 0	80	37·3	43·97	258	166
Corsewall	Com'rs. of N. Lighthouses	8	4 1	48	..	48·39	..	164
3.—LUCE BAY. 186 sq. mi.								
D Whithorn (Physgill)	F. B. Hopkins, Esq.	5	1 0	170	36·4	40·23	210	159
D Whithorn (Glasserton)	Adm. Johnston Stewart, C.B.	5	1 0	225	39·5	43·73	210	166
D Port William (Monreith)	L. R. Younger, Esq.	5	1 0	145	38·5	43·03	181	151
Stoneykirk (Ardwell House)	Sir E. Orde Stewart, Bt.	8	3 0	65	36·3	(44·70)	..	..
d New Luce (Public School)	J. Mackay, Esq.	5	1 0	200	46·6	(47·02)	(209)	(160)
4.—CREE & WIGTOWN BAY. 212 sq. mi.								
D Kirkcowan (Craighlaw)	Major W. M. F. Hamilton	5	0 9	300	48·3	54·84	237	181
D Newton Stewart (Little Barraer)	Brig.-Gen. G. M. P. Hawthorn, C.B.E., D.S.O.	5	1 0	180	..	52·14	219	164
D Newton Stewart (Duncree)	Maj.-Gen. Sir Keith Stewart K.C.B.	8	5 5	125	..	51·03	224	160
KIRKCUDBRIGHT. (Area, 902 sq. mi.)								
1.—DOON. 16 sq. mi.								
2.—CREE & WIGTOWN BAY. 222 sq. mi.								
d Borgue (Corseyard)	J. Douglas Brown, Esq.	5	1 0	50	39·8	44·06	..	149
3.—DEE. 377 sq. mi.								
Little Ross Lighthouse	Com'rs. of N. Lighthouses	8	4 8	136	..	30·31	..	129
D Mossdale (Hensol)	Mrs. Cuninghame	8	1 0	200	51·7	59·15	262	189
D Dalry (Glendarroch)	Miss M. Barbour	5	2 0	190	54·5	61·48	227	187
D Dalry (Garroch)	Arthur Young, Esq.	8	1 0	250	59·7	70·37	226	188
D Dalry (Forrest Lodge)	Sir John Wood, Bart.	5	1 0	500	63·2	80·32	226	191
D Carsphairn (Shiel)	S. Wilson, Esq.	5	1 0	835	73·9	84·53	233	212
D Carsphairn (Knockgray)	Miss Clark Kennedy	8	1 0	641	56·0	65·35	242	190
4.—URR & C. 196 sq. mi.								
Auchencairn (Torr House)	Thomas Ovens, Esq.	5	1 0	50	47·1	50·05	..	..
D Dalbeattie (Kirkennan)	Wellwood Maxwell, Esq.	5	0 9	30	46·2	53·55	229	186
D Dalbeattie (Drumstinchall)	Mrs. R. F. Hanbury	8	0 11	400	46·1	51·75	213	182
5.—NITH & C. 91 sq. mi.								
Dumfries (Cargen)	Col. R. F. Dudgeon	5	0 10	85	44·8	51·45	..	..
D Lochrutton (Dumfries W.W.)	J. Smellie, Esq.	5	1 0	273	44·0	50·22	229	170

DIVISION XII—SOUTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	DUMFRIES. (Area, 1,074 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—CLYDE—Right Bank Tributaries. 5 sq. mi.								
	2.—URR. 6 sq. mi.								
	3.—NITH & C. 421 sq. mi.								
D	Ruthwell (Comlongon Castle)	Earl of Mansfield	5	1 0	67	..	42·63	192	148
D	Mouswald (Schoolhouse)	Jas. F. Young, Esq.	8	0 10	115	..	50·08	223	176
D	Dumfries (Crichton Roy. Inst.)	C. C. Easterbrook, Esq.,M.D.	5	1 0	140	36·8	40·21	199	145
D	Carnsalloch	Miss K. M. Buchanan	5	0 8	20	..	44·95	204	170
D	Moniaive (Glencrosh)	Miss Macmillan	5	1 1	400	..	60·08	217	174
D	Durisdeer (Drumlanrig)	R. A. S. Ritchie, Esq.	5	0 9	191	43·6	54·30	240	182
	4.—ANNAN. 367 sq. mi.								
D	Dalton (Whitecroft)	Sir W. Maitland-Heriot, K.B.E.	5	0 11	240	..	48·35	223	178
D	Dalton (Kirkwood)	Captain J. Steel	5	1 0	250	..	51·20	265	185
d	Lockerbie (Castle Milk)	Mr. David McIntosh	5	1 6	199	..	50·91	..	..
M	Lockerbie (Thornbank)	W. Murdoch, Esq.	5	1 0	259	..	47·79	..	..
D	Lochmaben (Esthwaite)	W. J. Halliday, Esq.,M.B.E.	5	1 0	166	*41·9*	47·75	219	169
	5.—ESK. 275 sq. mi.								
D	Eaglesfield (Springkell Gdns.)	Mr. Charles George	5	1 0	300	..	52·07	199	172
D	Canonbie (Irvine House)	J. H. Milne Home, Esq.	5	0 9	200	..	54·58	211	183
D	Langholm (Drove Road)	Mrs. Jackson	5	0 9	270	..	60·03	218	186
	Langholm (Ewes)	Mrs. Lyall	5	1 0	445	53·4	60·60	..	..
D	Eskdalemuir Observatory..(+A)..	The Meteorological Office..	8	1 4	794	56·3	68·01	243	203
	ROXBURGH. (Area, 666 sq. mi.)								
	1.—NORTH TYNE. 6 sq. mi.								
	2.—TWEED LOWER—Right Bank Tributaries. 57 sq. mi.								
d	Kelso (Lempitlaw)	Mrs. A. C. Stirling	5	1 0	635	28·1	29·69	..	..
	3.—TWEED—Teviot & c. 431 sq. mi.								
d	Hawick (Wolfelee)	Mrs. Browne	5	0 10	537	37·6	40·25	..	179
D	Hawick (Branxholm Park)	C. W. Grieve, Esq.	5	0 6	457	..	42·07	211	174
d	Todshawhaugh	R. J. Usher, Esq.	5	1 0	450	..	40·11	(238)	(174)
d	Hawick (Dominion Priory)	Sister Mary Augustine	5	1 0	440	..	37·89	(231)	(162)
D	Denholm (Spital Tower)	T. G. Leadbetter, Esq.	5	0 9	410	32·7	34·50	238	168
D	Jedburgh (Jedneuk)	T. Yool, Esq.	5	1 0	271	26·3	26·49	209	140
D	Jedburgh (Crailing)	Major J. A. Paton	4	1 1	195	..	28·81	196	144
D	Ancrum (Monteviot)	Bertram Talbot, Esq.	5	1 0	210	29·8	29·11	208	151
	Linton (Clifton Park)	T. R. B. Elliot, Esq.	5	1 0	250	..	29·38	..	..
d	St. Boswells (The Fens)	J. J. Fairbairn, Esq.	5	1 6	260	28·0	27·11	..	132
D	St. Boswells (Monksford)	Lt.-Col. A. Mitchell	5	0 11	320	26·9	33·37	227	170
	Kelso (Springwood Park)	late Mr. W. Chaplin	5	1 0	130	26·2	25·93	..	..
	4.—TWEED—Ettrick & c. 10 sq. mi.								
D	Melrose (Asylum) *gauge* A	T. C. Mitchell, Esq.	5	0 6	480	31·4	33·62	208	151
D	Melrose (Asylum) *gauge* B	T. C. Mitchell, Esq.	5	1 0	480	30·8	31·78	208	151
	5.—TWEED—Gala. 6 sq. mi.								
	6.—TWEED—Leader & c. 25 sq. mi.								
D	Melrose (Drygrange)	A. T. Roberts, Esq.	5	1 0	360	27·5	28·67	201	143
	7.—TWEED, LOWER—Left Bank Tributaries. 25 sq. mi.								
D	Kelso (Broomlands)	J. C. Scott, Esq.	5	1 0	193	26·0	28·58	220	143
	8.—ESK. 106 sq. mi.								
d	Newcastleton Forest	Forestry Commission	5	1 0	700	..	60·06	..	..

DIVISION XIII—SOUTH-EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SELKIRK. (Area, 268 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TWEED—Teviot & c. 34 sq. mi.								
D Selkirk (Whitmuir Hall)	Miss M. E. Maxwell	5	1 6	800	..	38·94	247	171
2.—TWEED—Ettrick & c. 192 sq. mi.								
D Ettrick Manse	Rev. W. Addison	5	1 0	796	..	61·31	222	186
M Edinburgh W. W. (Meggat Hd.) 1.	Messrs. Leslie & Reid, C.E.	8	1 3	1496	54·5	57·82	..	..
Selkirk (Lindean Reservoir)	S. Pittillo, Esq.	5	1 0	900	31·2	36·77	..	..
3.—TWEED, UPPER—Right Bank Tributaries. 17 sq. mi.								
4.—TWEED, UPPER—Left Bank Tributaries. 19 sq. mi.								
D Caddenfoot (Fairnilee)	Mr. R. F. Williams	5	1 0	450	..	42·06	232	177
Galashiels (The Peel, Clovenfords)	W. R. Ovens, Esq.	5	1 0	450	35·5	38·34	..	..
5.—TWEED—Gala. 6 sq. mi.								
D Galashiels (Abbotsford Road)	Dr. J. W. Somerville	5	0 9	416	31·7	31·15	212	148
PEEBLES. (Area, 348 sq. mi.)								
1.—TWEED, UPPER—Right Bank Tributaries, 127 sq. mi.								
M Edin. WW (Ravenscraig) 3.	Messrs. Leslie & Reid, C.E.	5	1 3	2258	..	94·53	..	..
M Edin. WW (Gameshope Loch) 4.	Messrs. Leslie & Reid, C.E.	5	1 3	1860	..	81·32	..	..
M Edin. WW (Loch Craig Head) 2.	Messrs. Leslie & Reid, C.E.	5	1 0	2627	..	91·04	..	..
M Edin. WW (Gameshope Farm) 5.	Messrs. Leslie & Reid, C.E.	5	1 3	1538	..	77·21	..	..
M Edin. WW (Talla Linns Foot) 6.	Messrs. Leslie & Reid, C.E.	8	1 3	966	..	64·70	..	..
M Edin. WW (Quarter Hill) 7.	Messrs. Leslie & Reid, C.E.	8	1 3	1196	..	52·90	..	..
D Edin. WW (Victoria Lodge) 8.	Messrs. Leslie & Reid, C.E.	5	1 3	900	..	53·58	231	180
2.—TWEED, UPPER—Left Bank Tributaries. 192 sq. mi.								
D Stobo Castle	Mr. J. Finnie	5	1 0	594	34·9	39·97	211	162
d Peebles (Hydro.)	R. Turner, Esq., O.B.E.	5	0 9	700	..	(39·06)	..	..
D Peebles (Glentress Forest)	Forestry Commission	5	1 0	500	..	35·13?	202	147
D West Linton (Woodlea Cottage)	Messrs. Leslie & Reid, C.E.	5	1 0	801	..	39·54	254	181
d West Linton (Taieri)	Dr. R. Graham Yooll	5	1 0	770	..	(37·92)	(264)	(173)
3.—ESK. 23 sq. mi.								
D Eddlestone (Portmore Res.)	Messrs. Leslie & Reid, C.E.	11	1 0	1000	..	43·36	247	173
d Carlops (North Esk Res.)	Mr. J. Gilmour	5	1 6	1150	..	40·37	249	184
4.—CLYDE—Right Bank Tributaries. 6 sq. mi.								
BERWICK. (Area, 457 sq. mi.)								
1.—TWEED—Gala. 6 sq. mi.								
2.—TWEED—Leader. 92 sq. mi.								
D Earlston (Cowdenknowes)	Mr. T. J. Fleming	5	1 2	300	28·8	31·95	178	143
D Earlston (Greenacre)	Rev. A. E. McInnes	5	1 0	300	..	28·64	170	129
M Lauder (Burncastle)	J. G. S. Turnbull, Esq.	5	1 0	900	30·2	36·58	..	..
M Earnscleugh Burn (Blythe Rig)	J. G. S. Turnbull, Esq.	5	1 0	1200	36·1	42·73	..	..
3.—TWEED, LOWER—Left Bank Tributaries. 115 sq. mi.								
Coldstream (Lochton)	J. Aitchison, Esq.	5	1 0	151	25·9	28·34	..	..
d Coldstream School	D. Campbell Hardie, Esq.	5	1 0	100	..	27·83	200	133
D Coldstream (The Hirsel)	Mr. D. Black	5	1 4	130	25·6	24·52	179	126
D Swinton House (*Snowdon*) (+A)	Rev. A. E. Swinton	5	1 0	200	26·4	27·08	217	151

DIVISION XIII—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
BERWICK—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TWEED—Whiteadder. 164 sq. mi.								
D Marchmont House	Mr. Peter Ross	5	1 0	498	32·2	34·51	227	160
D Duns (Nisbet House Gdns.)	Mr. W. Cowieson	5	1 0	290	26·8	29·58	212	149
D Duns (Oxendean)	A. C. Fraser, Esq.	8	0 7	600	..	33·62	212	155
D Duns Castle	F. S. Hay, Esq.	5	1 0	500	30·8	34·67	211	148
D Duns (Manderston)	Mr. F. J. Marshall	5	1 6	356	30·7	33·24	213	146
5.—EAST COAST STREAMS. 80 sq. mi.								
St. Abb's Head	Comm'rs of N. Lighthouses.	8	5 6	212	23·6	27·71	182	144
HADDINGTON. (Area, 267 sq. mi.)								
1.—TWEED—Leader. 1 sq. mi.								
2.—TWEED—Whiteadder. 35 sq. mi.								
3.—EAST COAST STREAMS. 69 sq. mi.								
M Garvald (Donolly Reservoir)	A. Robertson, Esq., C.E.	5	1 0	550	32·8	34·53	..	..
M Garvald (Thorter Reservoir)	A. Robertson, Esq., C.E.	5	1 0	700	..	36·08	..	..
Barnsness Lighthouse	Com'rs. of N. Lighthouses.	5	1 2	20	..	22·53	..	..
D Dunbar (Belhaven Hill)	W. Ingham, Esq.	..	..	..	24·2	25·66	170	123
4.—TYNE & C. 114 sq. mi.								
W Lammermuir H. (West Hopes)	J. Ross, Esq., C.E.	5	1 0	736	34·4	40·14	..	..
W Lammermuir H. (Stobshiel Res.) B	J. Ross, Esq., C.E.	5	1 0	950	33·0	39·32	..	..
W Lammermuir H. (Stobshiel Res.) A	J. Ross, Esq., C.E.	5	1 0	998	..	33·56?	..	..
W Lammermuir H. (Lammerloch Res.)	J. Ross, Esq., C.E.	5	1 0	900	..	38·40	..	..
d Lammermuir H. (Stobshiel Fil.)	J. Ross, Esq., C.E.	5	1 0	650	..	28·14?	..	..
D Prestonkirk (Smeaton)	Sir J. Buchan-Hepburn, Bt.	5	1 0	100	24·9	29·59	210	136
5.—FIRTH OF FORTH. 48 sq. mi.								
d East Fortune Sanatorium	The Clerk of Works	5	1 4	101	..	27·67	..	124
D Dirleton	W. S. Curr, Esq.	5	1 6	149	..	26·87	159	118
D North Berwick Reservoir	A. Robertson, Esq., C.E.	5	1 0	150	25·4	26·79	189	135
D North Berwick (Hospital)	A. Robertson, Esq., C.E.	5	1 0	152	22·8	26·05	177	127
6.—INSULAR.								
Fidra	Com'rs. of N. Lighthouses.	..	..	..	..	18·67	..	..
MIDLOTHIAN. (Area, 369 sq. mi.)								
1.—TWEED—Gala. 68 sq. mi.								
M Stow (Cragdale)	J. Pringle, Esq.	5	0 6	642	..	37·93	..	..
2.—TYNE. 28 sq. mi.								
D Oxenfoord Castle Gardens	Mr. D. M. Welsh	5	1 6	409	..	31·20	234	146
3.—FIRTH OF FORTH. 3 sq. mi.								
4.—ESK. 116 sq. mi.								
M Moorfoot Hills (Bowbate) *old g.*	Messrs. Leslie & Reid, C.E.	11	0 6	1260	..	46·62	..	..
M Moorfoot Hills (Bowbate) *new g.*	Messrs. Leslie & Reid, C.E.	5	1 0	1260	..	45·87	..	..
D Moorfoot Hills (Gladhouse Res.)	Messrs. Leslie & Reid, C.E.	5	0 8	915	35·3	38·33	243	177
D Moorfoot Hills (Rosebery)	Messrs. Leslie & Reid, C.E.	5	0 9	750	..	35·49	230	171
D Moorfoot Hills (Edgelaw)	Messrs. Leslie & Reid, C.E.	5	0 10	654	..	33·74	230	167
D Gorebridge	W. S. B. Brown, Esq.	5	1 0	560	..	30·64	233	149
M Pentland Hills (Harehill)	Messrs. Leslie & Reid, C.E.	11	1 7	1297	..	36·97	..	..
D Pentland Hills (Martyrs Cross)	Messrs. Leslie & Reid, C.E.	5	1 0	750	..	40·60	229	167
D Pentland Hills (Loganlea)	Messrs. Leslie & Reid, C.E.	5	1 0	811	..	37·59	214	161

DIVISION XIII—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
MIDLOTHIAN—(*con*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—ESK—(*con.*)								
D Pentland Hills (Glencorse Fil.)	Messrs. Leslie & Reid, C.E..	5	1 0	638	..	37·66	214	156
D Pentland Hills (Glen Cottage)	Messrs. Leslie & Reid, C.E..	5	1 2	739	..	40·25	218	167
D Milton Bridge (Bush)	J. S. Abernethy, Esq.	5	1 0	600	..	36·61	223	165
D Newbattle (Public School)	W. Fowler, Esq.	5	4 3	300	..	28·27	181	134
5.—ALMOND & C. 153 sq. mi.								
D Pentland Hills (Crosswood)	Messrs. Leslie & Reid, C.E..	5	1 0	950	..	40·07	259	181
D Pentland Hills (Harperrig)	Messrs. Leslie & Reid, C.E..	5	1 0	900	..	45·21	249	185
D Pentland Hills (Morton)	Messrs. Leslie & Reid, C.E..	5	1 0	749	..	38·09	252	164
d West Calder (Addiewell)	Scottish Oils, Ltd.	12	21 0	620	35·7	36·44	..	..
D Pentland Hills (Boghall)....(+A)	College of Agriculture.	8	1 0	639	..	35·29	222	147
D Pentland Hills (Harlaw Res.)	Messrs. Leslie & Reid, C.E..	5	1 0	800	..	35·54	219	157
M Pentland Hills (Bonally Res.)	Messrs. Leslie & Reid, C.E..	11	0 6	1112	..	37·00	..	..
D Pentland Hills (Clubbiedean Rs.)	Messrs. Leslie & Reid, C.E..	4	0 6	773	..	36·21	231	151
M Pentland Hills (Swanston)	Messrs. Leslie & Reid, C.E..	5	0 6	550	..	33·78	..	..
D Pentland Hills (Fairmilehead)	Messrs. Leslie & Reid, C.E..	5	1 0	590	..	32·76	215	137
D Liberton (Alnwick Hill)	Messrs. Leslie & Reid, C.E..	5	1 0	407	..	31·48	201	136
D Colinton (Firhill Tank)	Messrs. Leslie & Reid, C.E..	5	0 6	412	..	31·86	229	144
D Liberton (College Garden)	College of Agriculture.	5	1 0	190	..	30·84	209	143
D Edinburgh (Royal Observatory)	Prof. R. A. Sampson, F.R.S.	8	1 0	441	24·4	31·69	227	147
D Edinburgh (Napier Road)	A. Harrison, Esq.	5	1 0	300	..	29·77	203	121
D Edinburgh (The Academy)	M. McC. Fairgrieve, Esq.	5	1 0	70	..	30·32	209	131
D Edinburgh (Univ. Engin. Lab.)	Prof. Sir T. Hudson Beare..	5	1 0	227	26·0	29·03	192	132
D Edinburgh (St. Roque)	Mr. H. B. Waugh.	5	0 10	270	..	29·89	206	134
D Edinburgh (City Observatory)	J. McDougal Field, Esq.	8	1 0	348	..	28·10	207	130
d Edinburgh (Royal Botanic Gd.)	Prof. W. Wright-Smith.	5	0 7	74	..	30·15	..	120
D Davidson's Mains (Broomfield)	J. I. Balfour-Melville, Esq.	5	0 10	42	..	30·86	201	156
6.—CLYDE—Right Bank Tributaries. 1 sq. mi.								
LINLITHGOW. (Area, 120 sq. mi.)								
1.—ALMOND & C. 60 sq. mi.								
M Uphall	No. 7. Messrs. Leslie & Reid, C.E..	8	1 4	790	..	36·52	..	..
M Uphall	No. 8. Messrs. Leslie & Reid, C.E..	8	1 4	577	..	36·75	..	..
M Uphall	No. 6. Messrs. Leslie & Reid, C.E..	8	1 4	680	..	36·52	..	..
M Uphall	No. 3. Messrs. Leslie & Reid, C.E..	8	1 2	711	..	36·22	..	..
D Uphall (Bangour Asylum)	Col. J. Keay, M.D.	5	1 0	587	..	34·52	227	161
d Uphall	Scottish Oils, Ltd.	8	0 10	380	..	34·43	..	..
Winchburgh (Hopetown Oil Wks.)	Scottish Oils, Ltd.	8	2 2	327	..	34·58	..	..
2.—FORTH—Right Bank Tributaries.—59 sq. mi.								
D Bathgate (Filters)	No. 1. A. L. Reid, Esq.	5	0 9	640	..	37·38	205	151
M Bathgate (Petershill Res.)	No. 2. A. L. Reid, Esq.	5	0 9	710	..	36·14	..	..
M Bathgate (Ballencrieff R.)	No. 3. A. L. Reid, Esq.	5	0 9	792	..	35·46	..	..
M Torpichon (Lochcote)	Wm. Beattie, Esq.	5	0 9	550	..	37·21	..	..
D Uphall (Beecraigs)	Messrs. Leslie & Reid, C.E..	5	1 0	531	..	30·53	215	153
M Carribber Reservoir	Wm. Beattie, Esq.	5	0 9	350	..	38·29	..	..
D Linlithgow (Grange)	H. M. Cadell, Esq.	5	0 9	430	..	34·43	215	155
D Linlithgow (Preston House)	Mr. C. Blair.	5	1 0	380	..	36·39	212	160
D Linlithgow Academy	The Rector.	5	1 0	170	..	36·81	227	151
3.—CLYDE.—Right Bank Tributaries. 1 sq. mi.								

DIVISION XIV—SOUTH-WESTERN COUNTIES.

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	LANARK. (Area, 881 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—TWEED, UPPER—Left Bank Tributaries. 20 sq. mi.								
	2.—ALMOND. 14 sq. mi.								
	3.—FORTH—Right Bank Tributaries. 9 sq. mi.								
D	Airdrie (Forrestburn Res.)	A. Simpson, Esq., C.E.	5	0 6	722	..	39·21	205	172
	4.—CLYDE—Right Bank Tributaries. 378 sq. mi.								
D	Crawford (Camps Res.)	Jas. McMillan, Esq.	11	0 10	969	..	58·31	203	177
M	Coulter Reservoir	No. 1. L. Costley, Esq., C.E.	11	1 0	1250	..	61·17	..	..
	Lamington (Cowgill Reservoir)	J. Chisholm, Esq., C.E.	5	1 0	1012	..	36·53?	..	..
D	Biggar (Shieldhill)	Miss Dunlop	5	1 0	850	..	35·98	245	186
D	Lamington House	Rt. Hon. Lord Lamington	5	1 0	730	..	40·39	208	168
	Carluke (Coldstream Reservoir)	L. Costley, Esq., C.E.	11	1 0	800	..	39·15	..	..
	Wishaw (Kirk Road)	J. Y. Scott, Esq.	6	1 0	480	..	33·98	..	..
	Wishaw (Coronation Street)	A. Hinshelwood, Esq.	5	1 3	510	..	32·59	..	..
d	Bothwell (Mt. Pleasant)	A. Muir, Esq.	5	1 0	150	..	35·84	..	..
	Glasgow (Tollcross Park)	W. Besant, Esq.	5	0 6	85	..	40·97	210	168
	Glasgow Green	W. Besant, Esq.	5	0 6	35	..	43·23	227	165
	Glasgow (Alexandra Park)	W. Besant, Esq.	5	0 6	141	..	40·10	208	157
D	Glasgow (Riddrie)	K. McKenzie Topping, Esq.	5	1 0	252	..	39·57	221	161
	Glasgow (Botanic Gardens)	W. Besant, Esq.	5	0 6	110	..	40·33	204	155
D	Glasgow University	Prof. J. R. Currie, M.D.	8	1 0	139	..	40·06	208	156
	Glasgow (Kelvingrove Park)	W. Besant, Esq.	5	0 6	48	..	41·10	185	174
	Glasgow (Victoria Park)	W. Besant, Esq.	5	0 6	30	..	39·93	183	173
	Glasgow (Ruchill Park)	W. Besant, Esq.	5	0 6	222	..	38·66	204	153
	Glasgow (Springburn Park)	W. Besant, Esq.	5	0 6	352	..	42·94	234	177
	Clarkston (Roughrigg Res.)	J. Chisholm, Esq., C.E.	5	1 0	664	..	37·45	..	..
D	Airdrie (Broomknoll Street)	J. Chisholm, Esq., C.E.	5	1 0	402	..	36·19	200	150
D	Gartcosh (Gartloch Hospital)	Mr. James McEwen	5	1 1	291	..	38·22	221	159
d	Caldercruix (Hillend Res.)	Mr. Boyd Drummond	5	3 6	620	37·3	39·45	198	171
	5.—CLYDE—Left Bank Tributaries. 448 sq. mi.								
	Elvanfoot (Potrenick Burn)	L. Costley, Esq., C.E.	11	1 0	1018	..	73·85	..	..
	Elvanfoot (Peden Reservoir)	L. Costley, Esq., C.E.	11	1 0	1030	..	68·85	..	..
D	Douglas (Kilncroft)	The Earl of Home	8	1 1	696	..	43·08	222	182
D	Strathaven (Glengavel Res.)	J. McMillan, Esq., C.E.	5	1 0	880	..	46·95	212	172
d	Coalburn	D. Todd, Esq.	5	0 8	735	..	(41·56)	(180)	(160)
D	Symington (Birkwood)	Col. D. E. Brand, D.S.O.	5	1 6	750	..	38·29	236	173
D	Strathaven (Dungavel)	A. K. Foulis, Esq.	5	1 0	798	..	49·42	222	185
D	Strathaven (Dunside Res.)	J. McMillan, Esq., C.E.	5	0 10	1010	..	48·75	234	183
d	Strathaven (Kype Res.)	W. H. Purdie, Esq., C.E.	11	3 0	941	..	44·00	..	..
W	Lesmahagow (Auchtyfardle)	Major T. E. Lander	5	1 0	578	..	38·13	..	..
D	Strathaven (East Overton Ho.)	H. Lee Dykes, Esq.	5	1 0	700	..	43·81	195	164
D	Stonehouse Sanatorium	W. A. Chapman, Esq.	5	0 7	526	..	38·06	197	149
D	Stonehouse (Glassford Filters)	J. McMillan, Esq., C.E.	5	0 9	775	..	47·34	227	182
D	Hamilton W.W. (Townhill)	W. H. Purdie, Esq., C.E.	7	0 5	436	35·6	43·37	216	172
D	Hamilton (Scott Street)	S. B. Becket, Esq.	5	1 6	260	..	37·98	192	152
D	Hamilton (Woodlea)	W. Fletcher, Esq.	5	1 4	192	..	38·12	203	162
	Busby (Thorntonhall)	A. H. Bishop, Esq.	5	1 0	441	..	44·83	210	155
	Carmunnock (Carnbooth)	R. Robertson, Esq., C.E.	5	1 0	365	..	44·98	202	160
D	Cambuslang (Greenlees Filters)	J. McMillan, Esq., C.E.	5	1 0	322	..	42·50	209	156
D	Glasgow (Dumbreck)	W. Gillies, Esq., Jr., LL.B.	5	1 0	76	..	44·07	214	164
d	Glasgow (Maxwell Drive)	Rev. F. C. Newbery	5	1 0	60	..	44·85	204	174
	Glasgow (Bellahouston Park)	W. Besant, Esq.	5	0 6	160	..	41·56	218	170
	Glasgow (Elder Park)	W. Besant, Esq.	5	0 6	40	..	40·72	205	161
	6.—IRVINE. 2 sq. mi.								
	7.—AYR. 1 sq. mi.								
	8.—NITH. 2 sq. mi.								
	9.—ANNAN. 7 sq. mi.								

DIVISION XIV—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	AYR. (Area, 1,135 sq. mi.)		*in.*	*ft in.*	*ft.*	*in.*	*in.*		
	1.—CLYDE—Left Bank Tributaries. 7 sq. mi.								
D	Glengarnock (Chemical Works)	A. Shanks, Esq.	8	15 0	105	54·4	49·21	196	158
	2.—FIRTH OF CLYDE. 60 sq. mi.								
D	Ardrossan (Burnfoot)	J. C. Duncan, Esq., C.E.	5	1 0	63	..	42·27	202	150
D	Stevenston (Greenhead Filters)	Gilbert Christie, Esq., C.E.	5	1 0	186	41·6	43·89	204	167
	Ardrossan (Busbie Res.)	J. C. Duncan, Esq., C.E.	5	1 0	374	..	49·21	..	..
D	Seamill	A. McDonald, Esq.	5	1 0	38	..	42·36	211	159
D	West Kilbride School	Alex. M. Fleming, Esq.	5	0 11	200	..	40·85	209	164
D	West Kilbride (Hunterston)	Lt.-Gen. Sir A. Hunter-Weston, K.C.B.	5	1 0	40	42·4	45·29	193	160
D	Largs (Woodbank)	A. Simpson, Esq.	5	1 0	25	..	49·65	211	161
D	Largs (Noddsdale)	H. P. Ramage, Esq.	5	1 3	200	..	53·89	212	178
D	Skelmorlie (West Park)	J. Wilkinson, Esq.	5	1 6	150	53·5	56·15	203	170
M	Shaws W.W. (Knockencorsan)	J. MacAlister, Esq., C.E.	6	1 0	1040	61·8	79·50	..	..
M	Shaws W.W. (Largs Road)	J. MacAlister, Esq., C.E.	6	1 0	910	*57·0*	68·34	..	..
	3.—IRVINE & C. 296 sq. mi.								
D	Monkton (Orangefield)	H. Carrick Webster, Esq.	5	1 0	30	..	38·17	196	163
D	Prestwick (Ladykirk Filters)	F. Pritty, Esq., C.E.	6	1 2	179	..	38·23	212	167
D	Troon	M. S. Brodie, Esq.	5	1 0	15	..	36·49	205	160
D	Symington	T. McMillan, Esq., M.A.	5	0 11	290	..	41·10	201	162
	Hurlford (Carnell)	G. D. Findlay Hamilton, Esq.	5	1 6	250	..	44·56	..	152
D	Barassie (The Tower)	Mrs. Hutchison	5	1 0	12	..	35·00	206	154
	Troon (Collenan Reservoir)	M. S. Brodie, Esq., C.E.	5	1 0	203	..	38·28	..	..
D	Irvine (Gailes)	H. W. Aitken, Esq.	5	1 0	12	35·9	39·39	201	165
D	Kilmarnock (Agricultural Coll.)	The Principal	8	1 0	90	37·3	39·39	197	156
D	Darvel (Kirkland Park)	W. Dunbar, Esq., C.E.	5	1 0	350	..	50·45	212	176
	Raithhill	W. Dunbar, Esq., C.E.	5	1 0	640	..	51·12	..	..
D	Kilmarnock (Kay Park) (R)	W. Dunbar, Esq., C.E.	5	4 0	130	..	40·46	202	159
D	Kilmarnock (Dean Castle)	J. Middleton, Esq.	5	1 0	190	40·7	41·12	183	171
D	Kilmarnock (North Craig Res.)	W. Dunbar, Esq., C.E.	5	1 0	319	41·2	45·16	213	176
d	Fenwick (Hareshaw Lodge)	E. Richmond Paton, Esq.	5	0 3	600	48·5	50·32	..	174
	Croilburn	W. Dunbar, Esq., C.E.	5	1 0	725	..	52·18	..	..
D	Fenwick (Amlaird Filters)	W. Dunbar, Esq., C.E.	5	1 0	590	43·3	46·64	214	169
	Fenwick (Pokelly Hill)	W. Dunbar, Esq., C.E.	5	1 0	510	..	(42·18)	..	..
	Craigendunton Reservoir	W. Dunbar, Esq., C.E.	5	1 0	805	46·4	51·14	..	..
	Loch Goin Reservoir	W. Dunbar, Esq., C.E.	5	1 0	865	49·4	51·20	..	..
D	Blair Gardens	W. Dunbar, Esq., C.E.	5	1 0	155	..	52·50	199	165
	Moor Farm	W. Dunbar, Esq., C.E.	5	1 0	810	..	56·03	..	..
	Stewarton Filters	C. Bodie, Esq.	5	1 0	515	..	46·59	209	165
D	Kirkland (Dunlop)	R. Clement, Esq.	5	1 0	400	..	51·15	191	168
D	Dalry (Munnoch Reservoir)	Gilbert Christie, Esq., C.E.	5	1 0	325	47·9	52·80	210	174
D	Dalry (Caaf Reservoir)	Gilbert Christie, Esq., C.E.	5	1 3	515	53·2	55·91	209	182
D	Dalry (Birkheadsteel)	Gilbert Christie, Esq., C.E.	5	1 0	520	..	59·08	209	185
D	Dalry W.W. (Filters)	W. Gray, Esq., C.E.	5	1 0	320	46·5	55·00	215	170
	Dalry W.W. (Thirdpart)	W. Gray, Esq., C.E.	5	1 0	560	52·0	52·65	..	..
d	Dalry (Camphill Reservoir)	James Lee, Esq., C.E.	11	0 6	611	..	67·50	..	194
D	Beith (Filter Station)	W. Gray, Esq., C.E.	5	1 0	415	..	46·81	207	167
D	Kilbirnie (Hole House Filters)	W. Gray, Esq., C.E.	5	1 0	377	..	67·53	224	184
M	Kilbirnie (Pundeavon Res.)	W. Gray, Esq., C.E.	11	1 0	898	..	80·76	..	..
	4.—AYR. 222 sq. mi.								
D	Ayr Cemetery	J. Young, Esq., C.E.	5	1 0	40	34·8	37·96	194	163
D	Catrine	Messrs. J. Findlay & Co.	6	1 0	300	..	46·27	208	179
D	Muirkirk (Kaimshill)	Dugald Baird, Esq.	5	2 0	750	43·4	48·48	228	176
	5.—DOON. 119 sq. mi.								
W	Loch Finlas	J. Young, Esq., C.E.	5	1 0	849	55·1	61·08	..	..
D	Dalmellington (Mossdale W.W.)	W. Gray, Esq., C.E.	5	1 0	764	..	48·39	243	183
D	Patna (Kerse Filters)	W. Gray, Esq., C.E.	11	1 0	743	44·4	50·68	243	180
d	Maybole (Knockdon)	late Thomas Cross, Esq.	5	1 6	352	..	(44·72)	(197)	(171)
D	Maybole (Otterden)	Robert Cross, Esq.	5	1 3	314	..	44·92	206	170
D	Ayr (Doonholm)	Col. N. Kennedy, D.S.O.	5	1 0	90	38·8	43·44	212	175
	6.—CULZEAN BAY & C. 32 sq. mi.								
	Turnberry Lighthouse	Com'rs. of N. Lighthouses	5	2 6	40	32·5	38·90	..	158
D	Maybole (Culzean Castle Gdns)	Mr. W. J. Orr	8	1 3	138	36·4	42·68	206	168

DIVISION XIV—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
AYR—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
7.—GIRVAN. 105 sq. mi.								
Girvan (Glendoune Gardens)	Mr. J. Simons	5	1 0	100	41·8	47·05	193	..
Loch Bradan	M. S. Brodie, Esq., C.E.	11	0 10	990	57·6	61·46	..	..
8.—STINCHAR & C. 155 sq. mi.								
D Ballantrae (Windyknowe)	Capt. J. M. Borland, C.B.,D.S.O.	5	1 0	62	..	43·20	208	172
D Colmonell (Knockdolian)	Capt. McConnell	5	1 0	170	44·8	48·31	212	181
D Pinwherry (Alticane)	D. I. W. Gray, Esq.	5	1 0	200	51·4	57·77	225	181
d Pinwherry (Daljarrock)	Major W. H. Coltman	5	0 5	190	..	51·68	..	173
D Girvan (Pinmore)	Major E. C. Maxwell	5	0 5	207	49·8	52·97	238	181
D Bar (Alton Albany)	Lt.-Cdr. G. Hughes-Onslow, D.S.C.	5	1 6	330	..	53·34	227	181
9.—LOCH RYAN. 12 sq. mi.								
10.—LUCE BAY. 15 sq. mi.								
D Ballantrae (Lagafater Lodge)	Cedric R. Boult, Esq.	5	0 11	792	64·8	66·38	205	193
11.—CREE. 40 sq. mi.								
12.—DEE. 9 sq. mi.								
13.—NITH. 62 sq. mi.								
D Glen Afton (Ayr Sanatorium)	Dr. E. E. Prest	5	1 0	850	53·2	62·16	223	185
D New Cumnock (Power Station)	New Cumnock Collieries, Ltd.	5	1 0	764	55·8	90·08	212	184
14.—INSULAR. 1 sq. mi.								
Ailsa Craig	Com'rs. of N. Lighthouses	5	1 0	35	27·0	34·78	176	150
RENFREW. (Area, 241 sq. mi.)								
1.—CLYDE—Right Bank Tributaries. 3 sq. mi.								
2.—CLYDE—Left Bank Tributaries. 194 sq. mi.								
Gorbals Dist.W.W. (Nether Cairn)	G. Henshilwood, Esq., C.E.	12	0 5	700	*57·2*	51·45	..	..
Gorbals Dist.W.W. (Middleton)	G. Henshilwood, Esq., C.E.	12	0 5	550	*55·8*	49·40	..	..
Gorbals Dist.W.W. (Ryat Lynn)	G. Henshilwood, Esq., C.E.	8	0 5	310	*49·0*	50·40	..	..
Gorbals Dist.W.W.(Waulk Glen)	G. Henshilwood, Esq., C.E.	12	0 5	280	47·2	50·35	..	..
Paisley W. W. (Muirhead)	James Lee, Esq., C.E.	12	1 0	482	..	57·67	..	..
Paisley W. W. (Springside)	James Lee, Esq., C.E.	12	1 0	532	..	64·76	..	..
Paisley W.W.(Back Thornlymuir)	James Lee, Esq., C.E.	12	1 0	646	50·9	57·75	..	..
Paisley W.W. (Stanely)	James Lee, Esq., C.E.	12	1 0	190	..	47·03	..	..
D Howwood (Midtown House)	late Andrew McNab, Esq.	5	1 6	231	..	49·90	198	174
Pollokshaws (Rouken Glen)	W. Besant, Esq.	5	0 6	156	..	47·40	205	160
D Pollokshaws (Pollok House)	Sir J. Stirling Maxwell, Bt.	5	1 0	50	..	40·38	216	163
D Glasgow (Queens Park)	W. Besant, Esq.	8	0 9	145	36·1	43·65	217	163
Glasgow (Maxwell Park)	W. Besant, Esq.	5	0 6	69	..	40·74	210	157
D Kilbarchan (Milliken Park)	M. Douglas Anderson, Esq.	5	1 6	75	..	48·48	199	175
D Kilbarchan (Glentyan) (R)	R. H. Hunter, Esq.	8	3 9	285	..	52·79	226	171
D Paisley (The Coats Observatory)	Observatory Committee	8	1 0	106	40·7	45·23	218	161
D Houston Manse	Rev. George Muir	5	1 0	103	..	49·19	205	154
M Shaws W.W. (Duchal Moor)	J. MacAlister, Esq., C.E.	6	1 0	1150	*70·7*	74·20	..	..
M Shaws W.W. (Creuch Hill)	J. MacAlister, Esq., C.E.	6	1 0	1350	*62·9*	75·20	..	..
M Shaws W.W. (Green Water)	J. MacAlister, Esq., C.E.	6	1 0	788	*68·1*	75·30	..	..
D Renfrew Aerodrome (+A)	The Meteorological Office	8	1 0	36	36·4	42·31	209	150
D Kilmacolm W.W.	James Grier, Esq.	5	1 0	600	..	72·22	220	182
D Kilmacolm Village	James Grier, Esq.	5	1 0	300	..	57·34	219	179
Bishopton (Ingliston)	D. Cross, Esq.	5	1 0	195	..	46·87	..	..
Bishopton (Dargavel)	Capt. R. Maxwell	5	1 0	33	..	43·46	..	..
D Shaws W.W. (Gryfe Reservoir)	J. MacAlister, Esq., C.E.	5	1 0	640	*65·1*	69·47	225	170
D Shaws W.W. (Mansfield)	J. MacAlister, Esq., C.E.	5	1 0	573	*64·5*	67·14	223	173
M Shaws W.W. (Darndaff Moor)	J. MacAlister, Esq., C.E.	5	1 0	850	*65·7*	67·60	..	..
3.—FIRTH OF CLYDE. 34 sq. mi.								
W Shaws W.W. (Kelly Dam)	J. MacAlister, Esq., C.E.	5	1 0	640	63·6	85·90	..	..
Inverkip (Daff Burn Reservoir)	Alex. Duthie, Esq.	8	1 0	506	..	67·05	..	..
M Langbank (East Bank Gardens)	T. Cross, Esq.	5	2 0	250	..	51·88	..	..
W Dougliehill Filters (Pt. Glas. W.W.)	James Murray, Esq., M.D.	8	1 6	540	..	56·39	..	..
W Parkhill Filters (Pt Glas. W.W.)	James Murray, Esq., M.D.	8	1 6	275	..	52·98	..	..
D Shaws W.W. (Compens. Res.)	J. MacAlister, Esq., C.E.	5	1 0	600	*64·4*	68·66	229	190
D Shaws W.W. (Loch Thom)	J. MacAlister, Esq., C.E.	5	1 0	643	65·4	71·59	233	197

DIVISION XIV—SOUTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	RENFREW—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—FIRTH OF CLYDE—(*con.*).								
W	Shaws W.W. (Shielhill)	J. MacAlister, Esq., C.E.	6	1 0	962	*65·7*	72·50	..	..
D	Shaws W.W. (New Yett's Dam)	J. MacAlister, Esq., C.E.	5	1 0	800	*65·0*	67·71	244	193
W	Shaws W.W. (Spango Burn)	J. MacAlister, Esq., C.E.	6	1 0	757	*65·1*	68·50	..	..
D	Shaws W.W. (Hole Glen)	J. MacAlister, Esq., C.E.	5	1 0	603	*62·2*	76·96	246	204
D	Greenock (Prospect Hill) (+A)	J. MacAlister, Esq., C.E.	5	1 0	199	61·6	65·31	221	179
D	Gourock (Coves Reservoir)	Alex. Duthie, Esq.	5	1 0	221	..	60·80	209	176
	4.—IRVINE. 10 sq. mi.								

DIVISION XV—WEST MIDLAND COUNTIES.

DUMBARTON. (Area, 270 sq. mi.)

1.—FORTH—Right Bank Tributaries. 10 sq. mi.

2.—FIRTH OF CLYDE & COWAL. 52 sq. mi.

D	Cardross (Kilmahew)	Claud A. Allan, Esq.	5	1	0	130	*44·7*	48·18	215	175
D	Helensburgh (Ferniegair)	J. N. Stirling, Esq., C.E.	5	1	0	21	49·7	53·02	219	178
D	Helensburgh (Valve House)	J. N. Stirling, Esq., C.E.	8	1	0	293	*52·7*	57·00	230	192
D	Rosneath Castle Gardens	Mr. J. Dawson	5	0	4	33	*50·7*	54·80	216	171
I	Garelochhead (Aikenshaw)	W. S. Turnbull, Esq.	6	1	0	32	*58·8*	56·40	..	..
D	Garelochhead (Ardarroch Gdns)	F. A. Bush, Esq.	5	1	0	100	..	76·44	224	195
D	Arrochar (Braeside)	J. Lindsay, Esq.	5	1	0	40	*74·6*	85·14	242	200
	3.—CLYDE—Leven. 149 sq. mi.									
D	Renton (Carman Filters)	W. Buchanan, Esq.	8	4	0	292	*47·6*	50·56	191	178
	Loch Lomond Park	W. Besant, Esq.	5	1	0	156	*49·5*	53·94	233	..
M	Glen Finlas Reservoir.....No. 1	George Beaton, Esq.	5	1	1	782	*69·1*	73·40	..	..
M	Glen Finlas Reservoir.....No. 2	George Beaton, Esq.	5	1	6	1194	*67·0*	73·78	..	..
M	Glen Finlas Reservoir.....No. 3	George Beaton, Esq.	5	1	5	1627	*75·2*	79·02	..	..
M	Glen Finlas Reservoir.....No. 4	George Beaton, Esq.	5	2	0	2040	*73·6*	77·22	..	..
M	Glen Finlas Reservoir.....No. 5	George Beaton, Esq.	5	0	9	1635	*64·6*	68·25	..	..
M	Glen Finlas Reservoir.....No. 6	George Beaton, Esq.	5	1	0	1172	*62·8*	68·68	..	..
D	Glen Finlas Reservoir.....No. 7	George Beaton, Esq.	12	1	6	810	*81·4*	91·12	218	194
	4.—CLYDE—Right Bank Tributaries. 59 sq. mi.									
D	Drumchapel (Wasdale)	F. C. Thomson, Esq.	5	1	0	49	*38·5*	43·20	233	162
W	Bearsden (Glengarnock)	A. Lithgow, Esq.	8	1	0	132	*40·4*	45·25	..	..
D	Milngavie (Dougalston)	Mr. J. Hamilton	5	1	0	150	*43·7*	41·16	217	175
D	Duntocher (Cochno Filters)	E. T. Collins, Esq., C.E.	5	1	0	400	*43·7*	45·75	190	165
W	Kilpatrick Hills (Greenside Res.)	E. T. Collins, Esq., C.E.	5	1	0	876	*50·8*	55·10	..	..
W	Kilpatrick Hills (Loch Cochno)	E. T. Collins, Esq., C.E.	5	1	0	909	*52·4*	54·20	..	..
W	Kilpatrick Hills (Jaw Reservoir)	E. T. Collins, Esq., C.E.	5	1	0	912	*52·7*	55·15	..	..

STIRLING. (Area, 463 sq. mi.)

1.—FORTH—Right Bank Tributaries. 263 sq. mi.

D	Polmont (Vellore)	R. M. W. Brown, Esq.	5	1	0	320	*36·3*	36·43	198	151
D	Falkirk (Inglewood, Laurieston)	Miss H. S. D. Ballantine	5	1	3	133	*36·6*	37·16	183	151
D	Falkirk (Westbank)....*Garden*	A. Nimmo, Esq.	5	1	0	75	*37·6*	38·77	198	163
D	Falkirk (Westbank)....*Lawn*	A. Nimmo, Esq.	5	1	0	105	*36·5*	36·99	195	160
d	Falkirk (Arnotdale)	W. Gibson, Esq.	5	1	0	105	*37·4*	36·85	196	153
	Falkirk (Kerse)	George Smith, Esq.	5	1	0	18	31·9	34·31	..	..
d	Grangemouth (Burgh Stables)	J. C. Wallace, Esq., C.E.	5	1	0	15	*31·8*	33·41	..	..
M	Little Denny Reservoir	C. Massie, Esq., C.E.	8	1	0	326	*43·1*	44·83	..	..
M	Little Denny Filters	C. Massie, Esq., C.E.	8	1	0	243	*42·2*	46·06	..	..
M	Kilsyth (Faughlin Res.)	C. Massie, Esq., C.E.	8	1	0	707	*55·2*	57·31	..	..
	Denny (Buckieburn Reservoir)	C. Massie, Esq., C.E.	8	1	0	825	*45·9*	41·26	..	..
	Denny (Buckieburn Filters)	C. Massie, Esq., C.E.	8	1	0	760	*43·3*	39·26	..	..
M	Earlsburn Reservoir	C. Massie, Esq., C.E.	8	1	0	1202	*58·0*	70·42	..	..
D	Stirling (North Third Res.)	J. C. Wallace, Esq., C.E.	8	1	0	560	*44·8*	57·38	248	187
D	Stirling (Touch Res.) .... No. 3	A. H. Goudie, Esq.	8	1	0	759	*47·7*	52·49	232	177
D	Stirling (Touch Res.) .... No. 2	A. H. Goudie, Esq.	8	1	0	707	*47·1*	50·98	232	177
D	Stirling (Touch Res.) .... No. 1	A. H. Goudie, Esq.	8	1	0	455	*47·6*	53·24	232	176
D	Stirling (Sauchie House)	J. Fyfe, Esq., C.S.I.	5	1	0	151	*36·5*	41·81	172	154
	Stirling (Westerlands)	J. W. Drummond, Esq.	5	1	0	110	*36·9*	41·75	..	..

DIVISION XV—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
STIRLING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—FORTH—Right Bank Tributaries—(*con.*).								
D Stirling (Craigforth)	A. J. Couper, Esq.	5	1 0	32	*39·1*	45·09	253	154
Bucklyvie (Gartinstarry)	C. Stirling, Esq.	5	1 0	150	..	49·63	197	158
D Gargunnock House	C. Stirling, Esq.	5	1 0	85	*43·4*	49·10	209	156
D Kippen (Arngomery)	Mr. A. Leitch	5	4 6	150	*47·5*	47·34	235	170
w Duchray Valley (Ben Lomond)	G. Henshilwood, Esq., C.E.	8	0 6	1500	*88·0*	91·85	..	..
w Duchray Valley (Glen Dhu)	G. Henshilwood, Esq., C.E.	8	1 0	500	*83·8*	88·90	..	..
w Duchray Valley (Comer)	G. Henshilwood, Esq., C.E.	8	1 0	600	*88·0*	91·50	..	..
w Duchray Valley (Achaidh Burn)	G. Henshilwood, Esq., C.E.	8	1 0	1200	*97·4*	100·90	..	..
w Duchray Val. (Hd. of Main Stream)	G. Henshilwood, Esq., C.E.	8	1 0	950	*92·8*	91·65	..	..
2.—FORTH—Teith. 5 sq. mi.								
d Stronachlachar (Invergyle)	G. Henshilwood, Esq., C.E.	8	1 0	376	*82·4*	84·90	210	..
3.—FORTH—Left Bank Tributaries. 15 sq. mi.								
D Bridge of Allan (The Lea)	Mr. W. Watt	5	0 8	100	*35·9*	39·33	239	159
d Bridge of Allan (Langlands)	W. H. Gillespie, Esq.	8	2 0	45	..	39·13	..	..
d Bridge of Allan (Lynwood)	J. Wallace Walker, Esq.	5	1 0	250	..	37·26	..	..
4.—CLYDE—Leven. 128 sq. mi.								
Strathblane (Blanefield)	G. Henshilwood, Esq. C.E.	8	1 0	250	*50·5*	52·05	..	..
d Killearn (Achnagowan)	Miss A. L. Guthrie-Smith	5	1 0	332	*56·1*	(56·51)	..	..
D Fintry (Police Station)	J. Sutherland, Esq.	5	1 0	300	..	64·04	213	179
w Loch Arklet (Corriehichon)	G. Henshilwood, Esq., C.E.	8	0 6	870	*89·3*	84·30	..	..
w Loch Arklet (Corriearklet)	G. Henshilwood, Esq., C.E.	8	0 6	950	*90·2*	90·50	..	..
5.—CLYDE—Right Bank Tributaries. 52 sq. mi.								
Strathblane (Mugdock Res.)	G. Henshilwood, Esq., C.E.	8	0 6	320	46·2	49·35	..	..
Milngavie (Eastertoun)	Major R. M. Ker	5	1 0	474	*45·0*	49·53	217	187
Kilpatrick H. (Burncrooks Res.)	E. T. Collins, Esq.	5	1 0	835	*49·5*	48·53	..	..
D Kilsyth (Innsbridge)	J. I. Little, Esq.	5	4 6	197	*47·3*	49·78	249	181
BUTE. (Area, 218 sq. mi.)								
1.—ISLE OF BUTE. 50 sq. mi.								
D Rothesay (Ardencraig)	Sir John Reid	5	1 0	200	49·0	59·99	239	200
D Port Bannatyne (Ettrickdale)	Lt.-Col.M.R.Gray Buchanan	5	1 0	160	..	56·14	220	185
2.—CUMBRAES. 4 sq. mi.								
D Millport (Marine Biog. Stat.)	R. Elmhirst, Esq.	5	1 0	16	..	45·35	203	160
3—ARRAN. 164 sq. mi.								
Pladda	Com'rs. of N. Lighthouses	5	1 6	53	45·0	30·05?	..	..
Holy Island (Pillar Rock)	Com'rs. of N. Lighthouses	5	0 11	68	48·6	24·92?	..	
D Dougarie Lodge	David Reside, Esq.	5	1 0	10	46·0	46·73	208	164
D Corrie Manse	Rev. James Brown	5	1 0	20	..	73·92	218	176
ARGYLL. (Area, 3,181 sq. mi.)								
1.—TAY—Tummel. 36 sq. mi.								
2.—SOUND OF ARISAIG, SOUND OF MULL & C. 317 sq. mi.								
D Morvern (Ardtornish)	O. H. Smith, Esq.	5	1 0	48	*83·3*	85·60	230	210
Ardnamurchan Lighthouse	Com'rs. of N. Lighthouses	5	0 9	79	43·4	31·75?	..	..
D Morvern (Drimnin)	Mrs. Gordon	5	1 0	225	*62·7*	64·56	228	203
D Loch Sunart (Glenborrodale)	A. M. Fletcher, Esq.	5	1 0	30	69·0	68·21	258	219
D Acharacle (Shielbridge)	A. M. Fletcher, Esq.	8	4 0	51	*68·2*	67·71	233	203
d Loch Shiel (Pollach House)	Forestry Commission	5	0 9	30	*83·5*	99·62	..	201
3.—LOCH LINNHE—Right Bank Tributaries. 139 sq. mi.								
D Morvern (Kingairloch)	Mrs. G. H. Strutt	5	1 0	40	*98·2*	106·17	216	203
Corran Lighthouse	Com'rs. of N. Lighthouses	5	1 0	13	81·0	87·45	213	207
D Ardgour House	Maclean of Ardgour	5	0 10	60	*90·0*	103·42	255	225

DIVISION XV—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ARGYLL—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—LOCH LINNHE.—Left Bank Tributaries. 165 sq. mi.								
D Duror (Achara)	W. D. Stewart, Esq.	5	1 2	45	*72·4*	86·68	247	202
D Barcaldine	Forestry Commission	5	1 0	50	*72·0*	66·41	198	174
D Barcaldine Gardens	Sir Charles Stewart, K.B.E.	5	1 0	50	..	79·13	262	208
d Carnach	L. R. Sutherland, Esq.	5	1 0	27	..	98·62	(236)	(196)
D Glencoe Gardens	Mr. J. B. Crichton	8	1 0	85	..	87·81	227	195
Glenleven (Blackwater House).4	British Aluminium Co. Ltd.	8	1 0	1069	*83·8*	89·97	..	..
D Glenleven (Blackwater Dam,S.) 2	British Aluminium Co. Ltd.	8	1 0	1072	*87·7*	95·37	249	205
D Glenleven (Kinlochleven) 1	British Aluminium Co. Ltd.	8	1 0	140	*90·0*	99·26	224	202
5.—LOCH ETIVE. 197 sq. mi.								
D Glen Etive	W. D. Fordyce, Esq.	..	1 0	200	*94·0*	105·85	216	197
6.—LOCH ETIVE—Loch Awe. 319 sq. mi.								
D Loch Awe (Dalavich)	D. Macdonald, Esq.	8	1 0	350	..	86·32	210	206
D Dalmally (Manse of Glenorchy)	Rev. Farquhar MacRae	5	1 0	150	*76·0*	83·20	217	196
D Bridge of Orchy (Inveroran)	Major W. H. Hunt	5	1 0	580	*83·5*	81·58	191	174
7.—FIRTH OF LORNE. 112 sq. mi.								
D Kilmelfort (Arduaine)	Lt.-Col. B. A. Campbell	5	0 10	23	*57·6*	65·79	198	193
D Kilmelfort (Ardmaddy Castle)	Marchioness of Breadalbane.	5	1 0	70	..	68·40	218	200
w Oban (Gleann-a-Bhearraidh Res.)	D. Galloway, Esq.	8	1 6	400	*57·5*	61·15	..	..
D Oban	D. Galloway, Esq.	8	1 0	21	53·0	56·29	204	182
8.—SOUND OF JURA. 163 sq. mi.								
D Lochgilphead (Poltalloch)	Mr. D. S. Melville	5	1 6	135	52·7	58·48	212	197
9.—KINTYRE, WEST. 146 sq. mi.								
Mull of Kintyre	Com'r. of N. Lighthouses	5	1 0	270	*41·8*	45·09	..	..
D Largie Castle	Mrs. Moreton Macdonald	5	1 1	160	*48·4*	46·98	222	167
10. KINTYRE, EAST. 177 sq. mi.								
D Campbeltown (South Park)	J. A. Gardiner, Esq.	8	0 10	20	*50·6*	55·31	227	179
Campbeltown (Devaar)	Com'rs. of N. Lighthouses	5	1 9	76	45·1	45·32	..	..
D Carradale (Torrisdale Castle)	Major W. Macalister Hall	5	1 0	84	*62·6*	69·86	224	181
d Skipness (Claonaig)	R. F. Graham, Esq.	5	1 1	160	..	55·56	..	..
11.—LOCH FYNE. 264 sq. mi.								
d Ardlamont (Kilbride)	J. W. Turnbull, Esq.	5	1 0	110	*49·0*	52·26	..	..
Otter Ferry (Ballimore)	Lt.-Col. J. MacRae-Gilstrap.	5	0 10	70	*52·1*	50·30	..	..
D Ardrishaig (Canal Office)	E. A. Bly, Esq., C.E.	5	1 0	48	*67·9*	68·89	216	194
D Loch Fyne (Castle Lachlan)	The Maclachl'n of Machlachl'n	5	1 0	25	*65·3*	70·19	226	208
D Crarae Lodge	Capt. G. I. Campbell	5	1 0	20	*68·2*	73·04	219	195
D Strachur Park	Lady G. Campbell	5	1 0	25	*66·7*	78·67	224	199
d Inveraray Castle Gardens	A. R. Page, Esq.	5	1 0	40	77·2	85·11	..	186
D Ardkinglas	Mr. J. Payne	8	1 6	37	*70·8*	79·49	220	193
12.—FIRTH OF CLYDE & COWAL. 242 sq. mi.								
D Toward (Knockdon Gardens)	Sir Norman Lamont, Bt.	5	1 6	101	*59·7*	61·76	220	190
D Toward (Inverchaolain)	Sir Norman Lamont, Bt.	5	1 0	..	*67·9*	68·42	219	195
d Dunoon (Reservoir)	W. Rodger, Esq., C.E.	12	3 6	245	*79·3*	75·96	..	183
D Ardnadam (Hafton Ho.)	R. Allan, Esq.	5	1 0	73	*76·5*	79·86	218	196
D Loch Eck (Benmore)	H. G. Younger, Esq.	5	1 3	40	*86·6*	98·71	229	205
D Glenbranter	Forestry Commission	5	1 0	188	*88·2*	90·65	212	191
Lochgoilhead (Ardgoil)	W. Besant, Esq.	5	0 6	20	*86·3*	91·99	236	205
d Lochgoilhead (Nuthill)	Mrs. Henderson	5	1 0	15	*74·8*	81·79	..	194
D Glencroe (Guithas Cottage)	D. Spraggan, Esq.	5	1 2	120	*101·0*	98·65	223	195
13.—CLYDE—Leven. 4 sq. mi.								

DIVISION XV—WEST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	ARGYLL—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	14.—INSULAR. 900 sq. mi.								
D	Islay (Ardbeg)	A. H. MacDougall, Esq.	5	7 0	46	45·1	50·69	226	188
	Sanda Lighthouse	Com'rs. of N. Lighthouses.	5	2 9	134	*36·8*	34·06	205	164
	Islay (Rhinns)	Com'rs. of N. Lighthouses.	7	3 6	74	..	43·49	..	..
	Islay (Lochindaul)	Com'rs. of N. Lighthouses.	5	0 7	45	44·0	43·65	..	..
	Islay (McArthur's Head)	Com'rs. of N. Lighthouses.	5	0 6	173	58·4	70·11	224	189
	Islay (Rhuvaal)	Com'rs. of N. Lighthouses.	5	1 0	69	42·0	43·74	205	186
D	Jura (Ardfin)	Colin Campbell, Esq.	5	1 0	160	*53·8*	59·37	235	188
	Lismore (Mousedale)	Com'rs. of N. Lighthouses.	7	3 10	38	43·7	47·85	197	178
D	Mull (Bunessan)	Duncan Cameron, Esq.	5	1 3	50	51·5	52·98	223	201
D	Mull (Kinlochspelvie)	G. W. Duncan, Esq.	8	0 10	100	93·2	93·34	228	214
	Mull (Benmore)	The Meteorological Office.	5	2 0	2800	135·8	(132·50)	..	..
D	Mull (Glencannel)	Duncan Cameron, Esq.	5	1 3	140	116·9	102·43	254	221
D	Mull (Ulva)	F. W. Clark, Esq.	5	1 0	30	64·8	66·99	253	207
d	Mull (Knock)	John Cameron, Esq.	5	1 3	50	89·6	(92·56)	..	..
D	Mull (Gruline)	J. W. Melles, Esq.	8	1 0	100	79·0	86·91	278	219
	Mull, Sound of	Com'rs. of N. Lighthouses.		..	..	61·5	67·84	242	207
	Fladda Lighthouse	Com'rs. of N. Lighthouses.	5	1 6	25	*58·2*	52·82	..	..
D	Tiree (Hynish House)	M. Maclean, Esq.	5	1 2	65	..	41·52	257	198
D	Tiree (Cornaigmore School)	Meteorological Office.	5	1 0	22	*44·7*	47·18	246	198

DIVISION XVI—EAST MIDLAND COUNTIES.

CLACKMANNAN. (Area 55 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 55 sq. mi.

D	Alloa House Gardens	Earl of Mar & Kellie, K.T.	5	3 0	40	*34·3*	37·40	189	154
W	Alloa W.W. (Gartmorn Res.)	Robert Cairns, Esq., C.E.	11	1 0	172	*33·2*	35·50	..	..
D	Dollar (Dollarbeg)	James Bleloch, Esq.	5	0 9	300	*38·6*	42·11	234	158
D	Tillicoultry (Westbourne)	Mrs. Willison	5	1 0	66	*37·0*	39·27	199	167
M	Glendevon (Broich Burn). No. 2.	H. F. Hodge, Esq., C.E.	8	1 0	1333	*76·5*	78·35	..	..
M	Glendevon (Burnfoot Hill). No. 8.	H. F. Hodge, Esq., C.E.	8	1 0	1721	*49·2*	(52·00)	..	..
M	Glendevon (Backhill). No. 9.	H. F. Hodge, Esq., C.E.	8	1 0	1067	*58·7*	65·34	..	..
D	Glendevon (Backhill)	H. F. Hodge, Esq., C.E.	8	1 0	1067	*60·5*	68·94	244	206

KINROSS. (Area, 87 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 15 sq. mi.

D	Dollar (Blairingone Manse)	Rev. J. F. Cameron	5	1 6	296	39·8	42·23	213	167

2.—LEVEN & C. 67 sq. mi.

D	Loch Leven Sluice	Mr. J. Thomson	8	0 9	360	35·8	37·46	178	139
D	Milnathort (Laurel Bank)	Capt. L. Kininmonth	5	1 0	398	*36·0*	38·77	199	162
D	Milnathort (Ledlanet)	Sir James C. Calder, C.B.E.	5	1 3	700	*44·4*	46·52	203	165
D	Milnathort (Ochil Hills San.)	Dr. R. H. Williamson	5	1 0	800	..	47.76	224	170

3.—EDEN. 2 sq. mi.

4.—TAY—Earn. 3 sq. mi.

FIFE. (Area, 505 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 68 sq. mi.

D	Rosyth (H. M. Dockyard)	The Supt. Civil Engineer.	8	1 0	53	25·7	28·87	173	117
d	Kincardine (Tulliallan)	Col. Alexander Mitchell	5	1 0	80	33·8	39·40	..	135
	Carnock (Craigluscar Res.)	D. H. Shaw, Esq., M.C., C.E.	12	0 4	480	*36·1*	37·95	..	..

DIVISION XVI—EAST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	FIFE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—LEVEN & C. 208 sq. mi.								
	Inverkeithing (Pitreavie Castle)	R. Richardson, Esq.	5	0 9	150	31·4	31·08	..	..
d	Dunfermline (Fordell House)	Earl of Buckinghamshire	5	1 0	250	33·2	35·57	..	..
D	Burntisland (Cullaloe Res.)	J. A. Waddell, Esq.	5	1 0	294	..	32·20	171	142
D	Kirkcaldy (Munro Street)	F. Braid, Esq.	5	1 0	66	31·3	33·40	208	139
	Cowdenbeath (Stenhouse St.)	C. A. Alexander, Esq.	5	1 0	516	40·7	36·66	..	..
M	Cleish Hills (Craiggaveral)	C. A. Alexander, Esq.	5	1 0	760	42·7	41·03	..	..
M	Cleish Hills (Roscobie Res.)	C. A. Alexander, Esq.	5	1 0	660	..	38·85	..	..
D	Kirkcaldy (Carberry)	R. Ritchie, Esq.	5	1 0	326	..	33·99	203	141
M	Cleish Hills (Blairadam)	C. A. Alexander, Esq.	5	1 0	670	38·2	34·85	..	..
M	Cleish Hills (Lochglow Res..)	C. A. Alexander, Esq.	5	1 0	900	41·4	36·54	..	..
D	Leslie (Lothrie Reservoir)	R. Ritchie, Esq.	5	1 0	700	37·5	41·54	211	153
D	Elie (The Castle)	Miss E. E. Scott Moncrieff..	5	0 8	9	26·3	25·42	199	123
D	Colinsburgh (Cairnie House)	Maj. R.A. Anstruther, D.S.O.	5	3 6	125	30·8	29·65	204	142
D	Colinsburgh (Balcarres)	Mr. W. H. Adams	5	1 0	300	32·2	30·76	187	146
D	Carnbee (Ovenstone W. W.)	C. Birrell, Esq.	5	1 0	168	26·6	24·84	187	123
	Kirkmay (Crail)	J. Duncan, Esq.	5	1 0	110	..	32·57	..	..
	3.—EDEN & C. 205 sq. mi.								
D	Ceres (Castlebank)	Mr. Alex. Smith	5	1 0	280	28·9	37·74?	189	154
D	Cameron Waterworks	W. Watson, Esq., C.E.	5	1 0	478	29·9	35·45	175	135
D	Cupar (Pitlair)	Mr. P. Webster	5	1 0	126	29·5	37·20	192	138
d	Cupar (Rankeillour)	Mr. R. Tunstall	5	1 0	240	28·7	36·36	201	144
D	Cupar (Fife & Kinross Asylum)	Medical Superintendent	5	1 0	210	27·7	34·50	191	142
D	Kingsbarns	Miss M. R. Nimmo	5	1 0	35	..	28·35	181	126
D	Cupar (Over Rankeillour)	H. Giles Walker, Esq.	5	1 0	200	28·7	31·86	180	127
D	St. Andrews (Waterworks)	W. Watson, Esq., C.E.	5	1 0	217	27·3	32·43	177	134
D	St. Andrews	W. Watson, Esq., C.E.	5	1 0	20	27·1	31·95	183	125
D	Leuchars (Training Base) ..(+A)..	The Meteorological Office	8	1 0	30	25·7	31·92	196	127
	4.—FIRTH OF TAY. 25 sq. mi.								
D	Newport (Tayfield)	W. Berry, Esq.	5	0 7	100	28·3	35·07	197	145
D	Newport Manse	Rev. John A. Lees	5	1 0	150	27·1	30·09	184	123
D	Newport (Seabank)	J. Grant Bruce, Esq.	5	4 6	15	27·5	29·90	173	128
D	Tayport (Lighthouse)	J. H. Thompson, Esq., C.E..	5	1 0	27	26·3	32·09	200	139
	5.—TAY—Earn. 1 sq. mi.								
	6.—INSULAR.								
D	Inchkeith	The Meteorological Office ..	8	1 0	190	26·3	24·69	180	126
	Inchkeith Lighthouse	Com'rs. of N. Lighthouses..	5	1 0	190	23·5	23·76	170	122
	Isle of May	Com'rs. of N. Lighthouses ..	5	4 0	180	20·1	23·43	..	..
	PERTH. (Area, 2535 sq. mi.								
	1.—FORTH—Right Bank Tributaries. 17 sq. mi.								
D	Gartmore House Gardens	Mr. H. B. Matheson	5	1 0	160	*56·0*	57·88	223	178
d	Loch Dhu	G. Henshilwood, Esq.,C.E...	8	0 6	325	79·8	80·50	..	195
	2.—FORTH, UPPER—Left Bank Tributaries. 84 sq. mi.								
w	Ledard	G. Henshilwood, Esq., C.E..	8	0 6	1500	*61·2*	70·58	..	..

DIVISION XVI—EAST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	PERTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—FORTH—Teith. 221 sq. mi.								
	Ochtertyre (Stirling)	Lt.-Col. J. C. Dundas, D.S.O.	5	0 9	14	..	42·01	..	..
w	Loch Drunkie	G. Henshilwood, Esq., C.E.	8	0 6	420	*62·1*	66·60	..	..
D	Invertrossachs	Sir James R. Wilson, Bt.	5	1 0	380	*58·7*	61·50	228	183
w	Ben Venue (Glasahoile)	G. Henshilwood, Esq., C.E.	8	1 0	1150	*80·4*	82·10	..	..
d	Loch Vennachar	G. Henshilwood, Esq., C.E.	8	0 6	275	55·3	56·90	..	182
d	Bridge of Turk	G. Henshilwood, Esq., C.E.	8	0 6	275	*63·5*	67·75	..	199
w	Loch Katrine (Tunnel Hill Top)	G. Henshilwood, Esq., C.E.	8	0 6	830	*81·4*	82·70	..	..
w	Ben Ledi	G. Henshilwood, Esq., C.E.	8	0 6	1400	*66·6*	72·30	..	..
d	Achnahard	G. Henshilwood, Esq., C.E.	8	1 0	474	*65·5*	72·75	..	198
	Callander (Leny House)	Capt. M. Murray Buchanan.	5	1 0	340	*56·3*	55·80	..	..
w	Strone Bridge	G. Henshilwood, Esq., C.E.	8	1 0	380	*72·4*	77·20	..	..
w	Glen Meann	G. Henshilwood, Esq., C.E.	8	1 0	800	*77·2*	79·85	..	..
w	Glen Finlas	G. Henshilwood, Esq., C.E.	8	1 0	1200	*79·0*	81·65	..	..
d	Glengyle	G. Henshilwood, Esq., C.E.	8	0 6	380	89·9	91·40	..	219
w	Upper Glengyle	G. Henshilwood, Esq., C.E.	8	1 0	750	*95·6*	94·75	..	..
w	Allt a' Choin	G. Henshilwood, Esq., C.E.	8	1 0	1250	*89·6*	90·15	..	..
w	Balquhidder (Blaircreach)	J. M. Fergusson, Esq.	5	1 0	460	*94·7*	99·43	..	..
d	Balquhidder (Stronvar)	J. Gault, Esq.	5	1 0	422	74·2	66·00	..	..
	4.—FORTH, LOWER—Left Bank Tributaries. 107 sq. mi.								
d	Dunblane	W. L. Gibson, Esq., C.E.	5	1 0	250	*37·3*	36·73	219	183
D	Glendevon (Glenquey Res.) No. 2.	H. F. Hodge, Esq., C.E.	8	1 0	945	*54·7*	59·80	202	188
D	Glendevon (Tormaukin)	W. Phillips, Esq.	8	1 6	770	*53·6*	54·39	213	161
D	Glendevon (Frandy)	H. F. Hodge, Esq., C.E.	8	1 0	911	*60·4*	65·50	235	187
	Glendevon (Glensherup)	D. H. Shaw, Esq., M.C., C.E.	12	0 4	945	*59·8*	61·04	..	..
M	Glendevon (Bald Hill) No. 1.	H. F. Hodge, Esq., C.E.	8	1 0	1202	*56·5*	61·90	..	..
M	Glendevon (Wether Hill) No. 10.	H. F. Hodge, Esq., C.E.	8	1 0	1408	*48·8*	54·23	..	..
	5.—LEVEN. 1 sq. mi.								
	6.—EDEN. 4 sq. mi.								
	7.—TAY—Earn. 376 sq. mi.								
D	Gleneagles House	Mr. J. Scrimgeour.	8	1 0	447	*45·3*	47·22	229	168
	Upper Farg (Plains)	Messrs. Leslie & Reid, C.E.	8	1 0	900	*35·9*	45·14	..	..
	Upper Farg (Main Bank)	Messrs. Leslie & Reid, C.E.	5	1 0	642	*31·3*	38·57	..	..
D	Dunning (Kippen House)	Lady Wilson.	5	1 0	450	*43·1*	50·24	196	161
D	Abernethy (Glenfarg House)	Norman I. Nasmyth, Esq.	5	0 9	120	..	40·93	195	163
d	Glenfarg (Fordel)	Maj.-Gen. A. H. Marindin, C.B., D.S.O.	5	1 0	700	..	43·73	..	..
D	Bridge of Earn (Ballendrick)	Mrs. J. P. Taylor.	5	1 0	50	*32·6*	39·08	213	149
d	Bridge of Earn (Kinmonth)	J. Moncrieff Wright, Esq.	5	1 0	..	*30·4*	32·98	..	..
D	Lochearnhead (Ardloch)	S. Moir, Esq.	5	1 0	370	*64·3*	65·20	241	183
D	Lochearnhead (Edinchip)	Sir Malcolm MacGregor, Bt.	5	1 0	513	*70·3*	72·54	229	193
D	Comrie (Dunira)	W. Gilchrist Macbeth, Esq.	10	1 6	240	*52·0*	56·88	228	171
D	Crieff (Strathearn Hydro)	Dr. G. Meikle.	5	1 0	478	40·9	40·49	214	154
	8.—TAY—Almond & C. 149 sq. mi.								
D	Perth (Wellshill Cemetery)	J. Ritchie, Esq.	5	1 0	77	30·8	30·82	202	131
w	Logiealmond Lodge	Earl of Mansfield.	8	1 3	1020	*48·5*	53·06	..	..
D	Glen Almond (Auchnafree)	Major J. A. C. Whitaker.	5	1 0	1015	*62·0*	70·55	190	167
	9.—TAY—Strathtay below Dunkeld. 33 sq. mi.								
D	Murthly (Douglasfield)	W. A. Rae, Esq.	5	1 0	237	*34·9*	36·75	171	136
D	Dunkeld (Snaigow)	W. H. Cox, Esq.	5	1 0	370	*35·0*	38·34	199	150
D	Dunkeld (Kincairney Lodge)	John Doig, Esq.	8	1 0	400	..	32·79	223	154

DIVISION XVI—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
PERTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
10.—TAY—Bran. 81 sq. mi.								
D Strath Bran (Glenquaich Lodge)	W. H. Cox, Esq.	5	1 0	900	*55·0*	59·69	183	164
11.—TAY—Strathtay above Dunkeld. 95 sq. mi.								
D Aberfeldy (Bolfracks Cottage)	Mrs. Drummond-Fish	5	1 0	350	..	42·91	217	140
D Aberfeldy (Dall Avon)	Dr. N. D. Mackay	5	1 0	320	*38·7*	42·84	204	144
D Grandtully	W. L. Macnaughton, Esq.	5	1 0	233	*36·1*	38·05	192	135
12.—TAY—Loch Tay. 241 sq. mi.								
D Killin (Auchmore Gardens)	Mr. J. Easson	5	1 0	380	*56·8*	62·39	207	175
13.—TAY—Lyon. 142 sq. mi.								
D Glenlyon (Meggernie Castle)	Sir E. S. Wills, Bt	5	1 0	700	*61·0*	64·69	200	177
w Fortingall (Glenlyon House)	Mr. J. W. Ford	5	1 0	425	*45·5*	49·54	..	..
14.—TAY—Tummel. 587 sq. mi.								
D Loch Rannoch (Dall)	Mr. D. Robertson, Jun.	5	1 0	722	*43·4*	48·63	204	172
D Pitlochry (Dunfallandy)	D. Stewart-Fergusson, Esq.	5	1 0	405	*32·9*	36·53	178	145
D Foss (The Manse)	Rev. W. Walker, M.A., B.D.	8	1 0	500	*40·4*	45·23	217	161
D Pitlochry (Bonskeid)	Dr. G. F. Barbour	5	1 0	540	*33·3*	33·89	189	152
D Fincastle House	Dr. G. F. Barbour	5	1 0	980	*34·7*	34·85	191	133
D Blair Atholl (Blair Castle Grdns)	Mr. J. Dickson	5	1 0	500	33·1	39·04	229	153
D Glen Bruar (Bruar Lodge)..No. 1	Mr. A. McLauchlan	5	1 0	1600	*45·2*	50·77	217	176
D Glen Bruar (Bruar Lodge)..No. 2	Mr. A. McLauchlan	5	1 0	1600	..	53·87	217	183
15.—TAY—Isla. 282 sq. mi.								
Blairgowrie (Kinloch Manse)	Rev. T. Milne	5	1 0	280	*29·6*	36·89	191	133
D Dunkeld (Cardney)	A. R. Macgregor, Esq.	5	1 0	350	*36·7*	41·52	189	158
D Kirkmichael (Ballintuim Ho.)	Miss M. A. Macdonald	5	1 4	700	*37·8*	47·74	232	158
16.—TAY—Left Bank Tributaries. 51 sq. mi.								
Pitfour Castle	Miss D. Cairns	..	..	..	*29·0*	33·04	..	134
D Kinfauns (Balthayock)	R. Wylie Hill, Esq.	5	4 6	323	*32·0*	35·92	194	140
D Perth (Ard Choille)	Earl of Mansfield	5	0 11	90	*31·8*	35·00	185	145
17.—FIRTH OF TAY. 45 sq. mi.								
Errol (Annat Cottage)	W. Kimm, Esq.	5	5 0	200	*27·5*	33·84	..	..
18.—SPEY—Right Bank Tributaries. 1 sq. mi.								
19.—LOCH LINNHE.—Left Bank Tributaries. 2 sq. mi.								
20.—CLYDE—Leven. 36 sq. mi.								

DIVISION XVI—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ANGUS (FORFAR). (Area, 875 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TAY—Isla. 211 sq. mi.								
D Kettins School	J. W. Sherriffs, Esq.	5	1 0	218	32·0	37·28	188	132
D Glamis Castle	Mr. D. McInnes	5	0 9	250	30·9	38·00	182	128
D Kirriemuir (Lintrathen) (+A)	G. Baxter, Esq., C.E.	8	1 0	700	34·7	40·85	197	143
M Kirriemuir (Balnakeilly)	G. Baxter, Esq., C.E.	5	1 0	700	34·1	40·42	..	..
M Kirriemuir (Dykends)	G. Baxter, Esq., C.E.	5	1 0	750	..	43·00	..	..
M Kirriemuir (Creich Hill, N.)	G. Baxter, Esq., C.E.	5	1 0	1491	..	52·20	..	..
M Kirriemuir (Backwater)	G. Baxter, Esq., C.E.	5	1 0	850	..	47·51	..	..
M Kirriemuir (Macritch)	G. Baxter, Esq., C.E.	5	1 0	1300	..	44·29	..	..
M Kirriemuir (Newton)	G. Baxter, Esq., C.E.	5	1 0	735	..	46·01	..	..
M Kirriemuir (Longdrum)	G. Baxter, Esq., C.E.	5	1 0	1045	39·3	52·72	..	..
M Kirriemuir (Glendye)	G. Baxter, Esq., C.E.	6	1 0	1050	41·6	57·39	..	..
M Kirriemuir (Barney)	G. Baxter, Esq., C.E.	5	1 0	1130	40·2	53·07	..	..
M Kirriemuir (Glenhead)	G. Baxter, Esq., C.E.	5	1 0	1340	..	55·50	..	..
2.—FIRTH OF TAY. 80 sq. mi.								
D Buddonness (Low Light)	J. H. Thompson, Esq., C.E.	5	1 0	27	26·4	30·11	201	130
D Dundee Harbour	J. H. Thompson, Esq., C.E.	5	0 11	14	27·4	30·39	181	129
D Dundee (Eastern Necropolis)	A. Macrae, Esq.	5	1 0	198	27·4	33·30	194	146
D Dundee (Stobsmuir Res.)	G. Baxter, Esq., C.E.	5	1 0	278	..	32·60	181	131
d Dundee (Camperdown Works)	Messrs. Cox Bros., Ltd.	5	1 0	300	26·8	35·78	..	..
D Balruddery	H. S. Sharp, Esq.	5	1 0	266	..	32·77	181	138
D Dundee (College Garden)	Director of Studies	8	1 0	147	27·6	33·65	190	146
3.—SOUTH ESK & C. 371 sq. mi.								
D Carnoustie	A. F. Anderson, Esq., C.E.	8	1 0	39	27·2	33·71	212	143
D Monikie Reservoir	G. Baxter, Esq., C.E.	5	1 0	494	34·7	38·58	181	137
D Monikie (Crombie Reservoir)	G. Baxter, Esq., C.E.	5	1 0	522	35·2	41·26	211	151
M Monikie (Fallaws)	G. Baxter, Esq., C.E.	8	3 0	585	33·2	42·00	..	..
D Arbroath (W. Cemetery)	J. W. Robertson, Esq.	5	1 0	93	25·6	32·41	164	125
w Arbroath (Muirheads Res.)	T. A. Hogg, Esq., C.E.	5	1 0	251	28·1	34·41	..	..
Forfar (Pitscandly House)	J. T. Ewen, Esq.	5	1 8	300	..	37·40	..	..
D Montrose	D. Maxwell, Esq., C.E.	5	1 0	16	26·2	28·02	·148	106
D Montrose (West-End Park)	D. Maxwell, Esq., C.E.	5	1 0	9	26·0	31·58	162	115
D Brechin (Argyll Street)	J. Hutton, Esq.	5	1 0	225	34·1	38·15	203	129
D Forfar W. W. (Den of Ogil)	Alex. C. Miller, Esq., C.E. 12x4		0 3	633	..	43·08	172	143
D Glenogil Waterworks	T. A. Hogg, Esq., C.E.	5	1 0	770	40·9	44·49	171	147
d Glen Prosen (Pearsie House)	G. M. Wedderburn, Esq.	5	1 0	600	39·1	42·24	..	117
d Glen Prosen (Balnaboth Gdns.)	J. F. Hardie, Esq.	5	1 0	575	..	54·30	..	..
4.—NORTH ESK & C. 213 sq. mi.								
D Brechin (Trinity)	Miss E. A. Stevenson	8	1 0	295	32·3	38·70	..	..
D Montrose (Sunnyside Asylum)	C. K. Alexander, Esq.	5	1 0	200	27·0	32·20	185	130
D Montrose (Kinnaber W.W.)	D. Maxwell, Esq., C.E.	4	1 0	40	26·9	31·33	176	122
Brechin (Stracathro Gardens)	Mr. A. Dunlop	5	1 0	200	30·5	39·10	..	..

DIVISION XVII—NORTH-EASTERN COUNTIES.

KINCARDINE. (Area, 382 sq. mi.)								
1.—NORTH ESK & C. 99 sq. mi.								
D Marykirk (Balmakewan)	W. Low, Esq.	5	1 1	120	30·3	36·80	187	136
D Marykirk (Balmakewan), No. 2	W. Low, Esq.	5	1 0	80	30·2	35·91	184	136
D Laurencekirk (Johnston Lodge)	R. B. Pearson, Esq.	5	1 0	400	33·1	41·35	200	151
D Fettercairn (Fasque)	Sir J. E. Gladstone, Bt.	5	0 10	320	36·0	43·49	221	147
2.—BERVIE, COWIE & C. 139 sq. mi.								
Todhead Pt. Lighthouse	Com'rs. of N. Lighthouses	5	1 9	114	..	27·07	..	121
d Stonehaven	W. Mowatt Hogg, Esq.	5	1 0	190	..	(34·20)	(184)	(139)
D Stonehaven (Mains of Cowie)	John Hart, Esq.	5	1 0	100	..	32·93	186	138
D Stonehaven (Ury Gardens)	Mr. W. Thomson	5	1 2	200	32·0	39·54	184	141
Girdleness	Com'rs. of N. Lighthouses	7	4 0	89	..	31·87	..	..

DIVISION XVII—NORTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
KINCARDINE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—DEE. 144 sq. mi.								
D Strachan (Bridge of Dye)	Sir J. E. Gladstone, Bt.	5	1 0	513	43·9	53·86	222	161
D Banchory (Invery)	Major Jas. Kerr	5	1 0	225	34·8	48·30	232	163
D Banchory (Woodlands Sch.)	D. B. McKelvie, Esq.	5	1 0	300	..	46·56	194	152
D Banchory (Invercannie)	T. F. Henderson, Esq., C.E..	5	1 0	205	31·9	36·94	222	148
w Durris House	(R)F. Allan, Esq.	5	3 0	200	34·1	(41·92)	..	..
ABERDEEN. (Area, 1,974 sq. mi.)								
1.—DEE. 672 sq. mi.								
D Glen Muick	T. F. Henderson, Esq., C.E..	5	1 0	1370	45·1	52·01	204	173
Glen Tanner (Aitnach)	T. F. Henderson, Esq., C.E..	5	1 0	1260	41·9	60·88	..	..
D Braemar (Bank)	G. H. Sinclair, Esq.	5	1 0	1111	35·4	40·08	207	164
D Braemar (Derry Lodge)	T. F. Henderson, Esq., C.E..	5	1 0	1400	38·1	33·55	229	173
D Balmoral Castle Gardens	Mr. R. F. Chalmers	5	1 0	927	33·0	39·09	248	150
D Abergeldie Castle Gardens	Mr. J. Durran	5	1 0	800	32·4	38·47	177	153
D Ballater (Irrigation Farm)	T. F. Henderson, Esq., C.E..	5	1 0	637	33·2	38·86	199	145
M Beinn Bhreac	T. F. Henderson, Esq., C.E. .	5	1 0	2700	47·1	(54·20)	..	..
d Aboyne	T. F. Henderson, Esq., C.E..	5	1 0	412	31·0	37·01	..	136
D Dess House	W. R. Davidson, Esq.	5	1 8	480	31·2	37·91	202	141
D Glen Gairn (Gairn Shiel Lodge)	T. F. Henderson, Esq., C.E..	5	1 0	1100	34·4	40·12	195	157
D Glen Gairn (Corndavon)	T. F. Henderson, Esq., C.E..	5	1 0	1500	37·3	41·47	195	166
D Torphins (School House)	Dr. George Davidson	5	1 4	480	..	35·35	188	132
M Lumphanan	T. F. Henderson, Esq., C.E..	5	1 0	490	31·6	35·99	..	..
D Drumoak (Drum Castle)	Mrs. Irvine	5	1 0	320	30·9	40·81	200	146
D Logie Coldstone School	J. B. Anderson, Esq.	5	1 0	608	32·0	34·25	215	136
D Aberdeen (Mannofield Res.)	T. F. Henderson, Esq., C.E..	5	1 0	171	30·5	35·66	219	144
2.—DON. 512 sq. mi.								
D Aberdeen (King's College)	(+A)..The Meteorological Office...	8	1 0	46	29·5	33·03	203	141
D Aberdeen (Woodside)	Forestry Commission	5	1 0	100	..	37·59	210	163
d Strathdon (Estates Office)	C. Christie, Esq.	5	1 2	990	35·0	37·62	..	138
D Craibstone (Sth. Meethill Field)	Prof. J. Hendrick.	5	1 0	275	33·6	38·53	212	146
D Craibstone (Woodlands Field)	College of Agriculture.	8	1 0	300	31·5	37·50	205	141
D Dyce (Parkhill House)	J. E. Crombie, Esq.	8	0 11	170	31·4	37·69	211	156
d Inverurie (Westfield)	J. Skinner Troup, Esq.	5	1 0	207	28·3	(34·81)	..	..
3.—YTHAN & C. 285 sq. mi.								
D Ellon (Esslemont House)	Capt.R.Wolrige Gordon,M.C.	5	1 6	100	30·2	38·15	216	152
D Ellon (Auchmacoy)	Earl of Caithness	5	1 0	150	..	34·19	212	156
D Haddo House	Earl of Haddo.	5	1 0	186	31·5	36·33	225	157
D Fyvie Castle	Col. Sir C. R. Forbes-Leith, Bt.	5	1 0	200	33·9	43·43	197	181
4.—UGIE & C. 257 sq. mi.								
d New Deer School House	J. A. Thomson, Esq.	5	1 0	397	32·3	39·76	..	157
D Peterhead (Stockbridge)	J. Robertson, Esq.	5	1 0	150	28·5	34·12	208	162
D Peterhead (Mains of Buthlaw)	W. Johnston, Esq.	5	1 6	120	30·3	34·68	216	168
D Peterhead (Forehill Works)	J. Dickie, Esq., C.E.	5	0 8	133	30·3	38·39	211	172
D Brucklay Castle	A. Dingwall Fordyce, Esq...	5	1 0	300	..	40·41	220	177
D Brucklay Castle Gardens	A. Dingwall Fordyce, Esq...	5	1 1	300	..	41·76	219	172
Kinnaird Head	Com'rs. of N. Lighthouses..	5	1 0	62	23·5	33·25	..	..
5.—DEVERON & C. 248 sq. mi.								
Huntly (Cosrdean)	R. Milne, Esq.	5	1 0	390	33·2	37·56	..	..
D Huntly (Cruchie)	Miss C. Joss.	5	1 0	400	31·7	34·68	214	150

DIVISION XVII—NORTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
BANFF. (Area, 630 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—YTHAN. 1 sq. mi.								
2.—DEVERON & C. 344 sq. mi.								
D Drummuir Castle	G. Clinton Chessor, Esq.	5	1 10	620	..	41·10	206	176
d Keith Station	F. G. Watt, Esq.	5	1 0	364	33·8	38·26	..	..
D Turriff (Forglen Gardens)	Mr. G. Stuart	5	1 0	220	31·9	36·09	215	165
D Gamrie (Clenterty P. School)	T. H. Smith, Esq.	5	1 0	420	40·1	41·89	213	160
D Banff	I. H. Gordon, Esq.	5	0 9	130	26·8	30·76	222	146
w Buckie (Rochonnie)	W. Hendry, Esq.	5	1 4	334	27·0	31·11	..	..
Buckie (West Church Street)	W. Hendry, Esq.	5	1 4	75	26·2	26·66	..	..
d Cullen House Gardens	Mr. R. Ferguson	5	1 2	150	30·6	33·58	..	..
3.—SPEY—Right Bank Tributaries. 285 sq. mi.								
D Ballindalloch	C. Mackenzie, Esq.	8	1 0	630	33·0	36·70	212	155
D Aberlour Orphanage	J. G. White, Esq.	5	1 0	350	32·7	33·14	183	143
MORAY. (ELGIN.) (Area, 477 sq. mi.)								
1.—DEVERON & C. 7 sq. mi.								
2.—SPEY—Right Bank Tributaries. 35 sq. mi.								
D Gordon Castle	Mr. C. Webster	5	1 0	104	29·8	31·96	196	142
3.—SPEY—Left Bank Tributaries. 133 sq. mi.								
D Grantown-on-Spey	W. A. Watson, Esq.	5	1 1	700	31·1	30·95	206	149
D Knockando (Windmill Cottage)	Mr. L. Younie	5	1 0	606	33·3	35·83	209	159
D Aberlour (Wester Elchies)	Mr. A. Ross	5	1 0	550	34·2	33·94	201	153
4.—LOSSIE & C. 154 sq. mi.								
D Lhanbryde (Blackhills House)	T. N. Christie, Esq.	5	3 6	310	29·2	36·23	200	161
d Elgin (Kirkhill)	P. J. Macdonald, Esq.	5	1 7	35	..	29·37	..	141
M Elgin (Rotha)	W. C. Young, Esq.	5	1 0	80	25·8	28·63	..	..
D Duffus House	Mr. W. Ogg	5	1 0	55	25·4	26·69	170	142
d Duffus (Hopeman Lodge)	Mrs. Gordon Duff	8	0 6	65	..	24·48	..	..
Covesea (Skerries)	Com'rs. of N. Lighthouses	5	0 8	32	..	23·89	178	133
5.—FINDHORN & C. 148 sq. mi.								
D Forres (Drumduan)	The MacKinnon of MacKinnon	5	0 9	120	..	28·22	182	138
NAIRN. (Area, 163 sq. mi.)								
1.—FINDHORN & C. 102 sq. mi.								
D Ardclach (Glenferness)	Mr. A. McKenzie	8	1 6	700	..	36·04	198	175
D Lethen	Col.Hon.I.M.Campbell, D.S.O.	5	1 1	350	..	*31·60	201	135
2.—NAIRN & C. 61 sq. mi.								
D Cawdor Castle	Mr. James Taylor	8	4 3	225	29·2	34·71	241	170
D Nairn (Balblair)	Major H. C. H. Allanby	5	1 0	94	24·5	28·67	197	137
D Nairn (Achareidh)	Major K. S. Clarke	8	1 0	59	24·3	28·97	223	145
D Nairn (Delnies)	The Meteorological Office	8	1 9	82	24·9	28·80	208	140

DIVISION XVIII—NORTH-WESTERN COUNTIES.

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
	INVERNESS. (Area, 4,146 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—TAY—Tummel. 28 sq. mi.								
D	Loch Ericht (Ben Alder Lodge)	Mr. F. Mackintosh	5	1 0	1175	..	53·28	256	182
	2.—SPEY—Right Bank Tributaries. 437 sq. mi.								
D	Dalwhinnie (Drumochter Lo.)	Mr. D. Kennedy	5	1 0	1375	57·7	62·84	246	203
	Glen Tromie (Gaick Lodge)	Mr. W. MacPherson	5	1 0	1500	*53·8*	(53·44)	..	..
D	Nethy Bridge (U.F. Manse)	Rev. John Ross	5	1 0	750	*27·5*	27·23	193	139
	3.—SPEY—Left Bank Tributaries. 257 sq. mi.								
D	Cluny Castle	Mr. A. Macdonald	5	1 0	816	*40·8*	37·72	244	184
M	Loch Spey	British Aluminium Co. Ltd.	5	1 0	1164	*66·4*	72·45	..	..
D	Glen Spey (Mealgarve)	British Aluminium Co. Ltd.	8	1 0	1135	*50·7*	57·38	242	196
D	Laggan (Gergask)	British Aluminium Co. Ltd.	8	1 0	870	*38·4*	38·95	230	172
D	Kingussie	British Aluminium Co. Ltd.	8	1 0	815	*29·4*	31·52	222	154
D	Alvie Manse	Rev. Dugald Maclean	5	1 0	750	30·3	31·96	214	149
D	Carr Bridge (Crannich)	Mrs. J. A. Doak	5	1 0	900	*28·6*	31·45	218	156
	4.—FINDHORN. 164 sq. mi.								
d	Tomatin (Dalmigavie Lodge)	Mr. A. Kennedy	5	1 0	1180	..	42·69	(244)	(167)
	5.—NAIRN & C. 131 sq. mi.								
	6.—NESS—Right Bank Tributaries. 252 sq. mi.								
D	Fort Augustus (St. Benedict's)	The Procurator	5	1 0	68	*44·2*	43·86	208	157
d	Loch Ness (Killin, Whitebridge)	British Aluminium Co. Ltd.	8	1 0	1200	*47·9*	53·64	..	..
D	Loch Ness (Garthbeg)	British Aluminium Co. Ltd.	8	1 0	645	*41·5*	40·87	228	156
D	Loch Ness (Foyers)	British Aluminium Co. Ltd.	8	1 0	52	38·2	43·06	209	147
d	Loch Ness (Aberchalder)	British Aluminium Co. Ltd.	8	1 0	700	*35·8*	40·34	..	153
D	Inverness (Culduthel Res.)	A. Knowles, Esq.	5	1 0	242	*26·7*	28·35	193	132
	7.—NESS—Garry &c. 185 sq. mi.								
M	Loch Quoich (Loan)	Col. D. W. Cameron	5	1 0	650	..	133·74	..	..
d	Loch Quoich (Kinlochquoich)	Col. D. W. Cameron	5	1 0	560	..	118·04	..	..
D	Loch Quoich (Glenquoich)	T. Mackenzie, Esq.	5	1 2	569	110·8	117·21	249	226
D	Loch Oich (Port McDonnell)	A. R. Crawford, Esq.	5	1 0	122	..	68·48	241	174
	8.—NESS—Moriston. 120 sq. mi.								
D	Glenmoriston (Invermoriston Hotel)	P. J. Kydd, Esq.	5	1 0	70	..	49·39	222	169
	9.—NESS—Enrick. 131 sq. mi.								
D	Inverness (Ruigh Ard Asylum)	Dr. T. C. Mackenzie	5	0 11	330	*29·9*	33·49	212	141
	10.—BEAULY. 341 sq. mi.								
D	Beauly (Culmill)	W. L. McWilliam, Esq.	5	1 0	190	..	39·74	181	144
	11.—CROMARTY FIRTH. 13 sq. mi.								
	12.—SOUND OF SLEAT. 259 sq. mi.								
D	Mallaig Manse	Rev. D. M. Sinclair	5	1 0	150	*55·0*	59·15	251	225
D	Loch Nevis (Inverie Gardens)	Mr. J. Huggins	5	1 0	15	*85·6*	82·87	251	219
d	Glenelg Manse	Rev. A. Mactaggart	5	1 0	85	*57·3*	62·83	..	..
	13.—SOUND OF ARISAIG. 126 sq. mi.								
D	Moidart (Kinlochmoidart)	J. C. Stewart, Esq.	5	1 0	13	*69·4*	79·63	231	213
D	Moidart (Roshven)	P. Blackburn, Esq.	5	1 0	40	*67·6*	80·56	237	231
D	Arisaig (Faire-na-Sguir)	Miss C. C. Astley	5	1 0	30	*55·7*	55·05	256	196
D	Arisaig House	Mr. W. Grant	5	1 0	40	*62·9*	66·49	249	217
	14.—LOCH LINNHE—Right Bank Tributaries. 48 sq. mi.								
d	Loch Eil (Achdalieu)	Col. D. W. Cameron	5	1 0	100	*64·6*	63·21	..	188
	15.—LOCHY—Right Bank Tributaries. 143 sq. mi.								
D	Loch Arkaig (Achnacarry)	Col. D. W. Cameron	5	1 0	128	*83·6*	86·95	233	197
d	Loch Arkaig (Glendessary)	Col. D. W. Cameron	5	1 0	300	*109·5*	107·08	..	210

DIVISION XVIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
INVERNESS—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
16.—LOCHY—Left Bank Tributaries. 362 sq. mi.								
Loch Treig (Creaguaineach)	British Aluminium Co.,Ltd..	5	1 0	800	*70·7*	75·81	..	..
M Ben Alder (Loch a'Bhealich)	Mr. F. Mackintosh.....	5	1 0	2360	..	92·50	..	..
Loch Ossian (Strathossian Ho.)	British Aluminium Co.,Ltd..	8	1 0	1180	*66·9*	(78·03)	..	..
Fort William (Allt'a Mhuilinn)	British Aluminium Co.,Ltd..	8	1 0	1000	*85·0*	85·73	..	..
D Fort William (The Factory)	British Aluminium Co.,Ltd..	8	1 0	75	..	75·37	227	191
Roybridge (Lairig Road)	British Aluminium Co.,Ltd..	8	1 0	1650	*89·5*	98·59	..	..
M Ben Alder (Lochan Sgoir)	Mr. F. Mackintosh.....	5	1 0	2300	..	96·30	..	..
Spean Bridge (The Cour)	British Aluminium Co.,Ltd..	5	1 0	1050	..	95·26	..	..
Spean Bridge (Sgurr Finisgaig)	British Aluminium Co.,Ltd..	8	1 0	2000	*95·0*	86·28	..	..
d Loch Treig (Fersit)	British Aluminium Co.,Ltd..	8	1 0	850	*59·9*	68·58	..	..
Tulloch (Allt Laire)	British Aluminium Co.,Ltd..	5	1 0	1050	..	58·52	..	..
d Roybridge (Allt Leachdach)	British Aluminium Co.,Ltd..	8	1 0	650	..	64·89	..	..
M Loch Pattaig	Sir J. F. Ramsden, Bt.....	5	0 6	1450	*64·0*	(59·87)	..	..
Glen Spean (Craigbeg)	British Aluminium Co.,Ltd..	8	1 0	860	*52·8*	57·34	..	..
W Loch Lochy (Invergloy)	Mr. J. Strang.....	5	1 0	200	*58·5*	73·03	..	..
M Loch Laggan (Ardverikie)	Sir J. F. Ramsden, Bt.....	5	0 6	830	*54·4*	56·66	..	..
17.—LOCH LINNHE—Left Bank Tributaries. 120 sq. mi.								
D North Ballachulish (Alltshellach)	B. Chinnery-Haldane, Esq..	5	2 1	80	*76·9*	85·53	246	215
D Onich	Forestry Commission.....	5	1 3	48	..	80·38	256	198
D Glenleven (Blackwater Dam, N) 7	British Aluminium Co.,Ltd..	8	1 0	1072	*85·8*	94·21	242	199
D Kinlochleven (Kinlochmore Lo.)	Mr. Ian Currie.....	5	1 0	115	*96·7*	96·28	249	213
Kinlochleven (Mamore Lodge)	Mr. Ian Currie.....	5	1 8	700	*99·5*	97·48	..	..
Glenleven (Invercam) No. 6	British Aluminium Co.,Ltd..	8	1 6	1070	*77·3*	75·85	..	..
Glenleven (Ciarin) No. 3	British Aluminium Co.,Ltd..	8	1 6	1200	*84·9*	81·58	..	..
Glenleven (Loch Eilde Mhor) 8	British Aluminium Co.,Ltd..	8	1 6	1130	*99·4*	100·46	..	..
Glenleven (Loch Eilde Beg) No. 9	British Aluminium Co.,Ltd..	8	1 6	1125	*100·0*	96·35	..	..
Glenleven (Corrour) No. 5	British Aluminium Co.,Ltd..	8	1 6	1260	*71·2*	75·32	..	..
d Fort William	British Aluminium Co.,Ltd..	5	1 0	216	78·8	79·64	..	..
18.—INSULAR, INNER HEBRIDES. 786 sq. mi.								
d Isle of Eigg	Rt. Hon. Walter Runciman, P.C.	8	2 8	150	*53·5*	61·98	..	228
Hyskier	Com'rs of N. Lighth's.....	5	0 5	31	*40·0*	59·28	..	208
D Skye (Kyleakin, Dunringell)	Maj. A. D. Mackinnon, C.M.G.	5	2 1	80	*62·4*	70·48	250	204
Kyleakin Lighthouse	Com'rs. of N. Lighthouses..	5	0 8	28	60·8	60·62	210	197
Oronsay Lighthouse	Com'rs. of N. Lighthouses..	5	0 6	10	*52·7*	53·74	..	..
D Skye (Scalpay Island)	Mr. D. Gunn.....	5	1 0	4	*75·1*	85·78	261	203
D Skye (Portree)	D. Dewar, Esq.....	5	1 0	65	*61·7*	71·59	259	220
Skye (N. Eist Point)	Com'rs. of N. Lighthouses..	5	0 8	65	*50·0*	49·51	..	182
D Skye (Dunvegan)	Mrs. Mackenzie.....	5	3 0	47	*65·8*	65·45	251	216
Rona	Com'rs. of N. Lighthouses..	5	1 3	202	*42·5*	35·65	..	..
19—INSULAR, OUTER HEBRIDES. 243 sq. mi.								
Glass Island Lighthouse	Com'rs. of N. Lighthouses..	5	0 9	31	43·3	26·96?	219	188
Monach Lighthouse	Com'rs. of N. Lighthouses..	8	0 4	2	46·6	33·17	..	..
D Barra (Skallary)	J. Smith, Esq.....	8	0 10	26	..	44·40	261	205
D Lochmaddy (Rudha-nan-Gall)	R. MacDonald, Esq., C.M.G.	5	1 0	12	47·7	40·85	268	200
D N. Harris (Amhuinsuidh Castle)	Norman Robertson, Esq...	5	1 3	12	57·5	55·04	256	233
ROSS & CROMARTY. (Area, 3,237 sq. mi.)								
1.—NESS—Moriston. 35 sq. mi.								
D Glenmoriston (Cluanie Inn)	per Capt. W. N. McClean..	5	1 0	725	..	109·60	228	210
2.—BEAULY. 109 sq. mi.								
W Monar	Major J. S. Stirling.....	5	0 9	700	..	87·96	..	..
3.—MORAY FIRTH COAST STREAMS. 64 sq. mi								
D Fortrose	A. Thom, Esq.....	5	1 0	69	*23·4*	26·73	208	128
d Fearn (Geanies)	Mr. A. Munro.....	5	0 11	200	*23·1*	24·94	..	127

DIVISION XVIII—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ROSS & CROMARTY—(*con.*).		*in.*	*ft. in,*	*ft.*	*in.*	*in.*		
4.—CROMARTY FIRTH. 714 sq. mi.								
D Muir of Ord (Fairburn)	Major J. S. Stirling	5	1 0	500	..	39·82	209	147
D Strathpeffer	W. P. Hutton, Esq.	8	1 0	125	30·5	33·40	245	143
D Dingwall (The Academy)	G. L. Turnbull, Esq.	5	1 0	18	*29·0*	31·13	185	130
d Cromarty House	Mr. A. Ross	5	1 3	80	*25·1*	23·32	..	..
Cromarty	Com'rs. of N. Lighthouses	5	1 0	21	*24·4*	26·16	..	..
D Alness (Ardross Castle)	Mr. John Melrose	5	1 0	450	38·5	43·03	217	164
5.—DORNOCH FIRTH. 355 sq. mi.								
D Tain (Ardlarach)	Col. C. MacIver Ritchie	5	1 0	400	*29·4*	32·19	242	153
Tarbetness	Com'rs. of N. Lighthouses	5	1 10	62	*23·0*	23·64	..	..
6.—ENARD BAY. 78 sq. mi.								
7.—LOCH BROOM & C. 367 sq. mi.								
Loch a' Bhraoin (Vroain)	Rev. Sir Montague-Fowler, Bt.	8	0 9	822	*62·2*	(69·90)	..	..
Loch Drome	Rev. Sir Montague-Fowler, Bt.	8	0 7	905	*63·4*	71·71	..	..
Braemore House	Rev. Sir Montague-Fowler, Bt.	8	0 7	800	*61·9*	71·67	..	..
Inverbroom House	Rev. Sir Montague-Fowler, Bt.	8	0 7	50	*54·7*	58·72	..	..
D Ullapool	Dr. D. Wallace	5	1 6	75	48·0	50·00	224	189
8.—LOCH EWE, LOCH TORRIDON & C. 423 sq. mi.								
D Loch Torridon (Bendamph)	Earl of Lovelace	5	1 0	20	85·1	77·15	228	219
D Poolewe (Inverewe Gardens)	Mr. W. Hepburn	5	0 6	20	*55·2*	50·10	246	192
Rudh Ré Lighthouse	Com'rs. of N. Lighthouses	5	3 6	53	*39·0*	36·07	245	185
9.—LOCH CARRON, LOCH ALSH & C. 401 sq. mi.								
D Glenshiel (Ratagan)	Forestry Commission	5	1 0	12	*80·0*	85·97	217	207
d Loch Duich (Inverinate)	J. Finlayson, Esq.	5	1 0	28	..	(82·90)	(251)	(219)
Loch Carron (Strome Ferry)	Mr. D. D. Munro	5	1 0	50	*64·7*	66·96	..	..
D Loch Carron (Dunhulladale)	Mrs. G. J. Campbell	5	1 0	9	*70·5*	76·40	273	225
Applecross Gardens	Mr. J. McCowan	5	1 6	70	57·3	46·09?	..	..
D Achnashellach	Forestry Commission	5	1 0	225	*79·2*	77·30	237	233
10.—INSULAR, OUTER HEBRIDES. 691 sq. mi.								
d Stornoway (Leurbost Sch.)	A Matheson, Esq.	5	0 6	100	..	(39·64)	..	..
Tiumpan Head Lighthouse	Com'rs. of N. Lighthouses	5	1 0	103	*43·5*	33·25	..	..
Stornoway Lighthouse	Com'rs. of N. Lighthouses	5	0 6	28	*46·0*	39·58	223	195
D Stornoway	The Meteorological Office	8	1 0	30	49·9	45·74	259	200
Butt of Lewis Lighthouse	Com'rs. of N. Lighthouses	8	3 9	51	*39·6*	34·03	221	173

DIVISION XIX—NORTHERN COUNTIES.

SUTHERLAND. (Area, 2,080 sq. mi.).

1.—DORNOCH FIRTH. 413 sq. mi.								
d Skibo Castle Gardens	R. D. Cameron, Esq.	5	1 0	62	..	(32·73)	(209)	(140)
D Lairg	A. Gunn, Esq.	5	1 0	330	37·3	38·40	188	144
2.—FLEET, BRORA & C. 309 sq. mi.								
d Golspie (Technical School)	E. W. Read, Esq.	6	1 2	100	32·2	30·54	..	..
3.—HELMSDALE & C. 226 sq. mi.								

DIVISION XIX—NORTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SUTHERLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NORTH COAST STREAMS. 736 sq. mi.								
d Forsinard Station	Mr. W. Simpson	5	1 4	505	..	(39·41)	..	..
D Skerray (Borgie)	Mr. C. Spence	5	1 0	110	37·5	45·87	241	207
D Tongue	Rev. W. J. Lundie	5	1 0	180	41·0	41·03	253	185
D Cape Wrath	Com'rs. of N. Lighthouses	5	0 9	346	..	33·05	243	197
5.—LOCH LAXFORD & C. 256 sq. mi.								
D Loch More (Achfary)	Mr. J. Munro	5	1 0	137	75·8	81·13	268	234
6.—ENARD BAY. 138 sq. mi.								
Stour Head	Com'rs. of N. Lighthouses	5	0 10	174	35·8	24·59?	216	148
7.—INSULAR. 2 sq. mi.								
CAITHNESS. (Area, 696 sq. mi.).								
1.—BERRIEDALE, DUNBEATH & C. 169 sq. mi.								
Berriedale (Langwell)	Duke of Portland	5	1 6	150	..	34·69	..	..
Clythness	Com'rs. of N. Lighthouses	5	1 5	133	29·6	32·00	..	146
2.—WICK & C. 184 sq. mi.								
D Wick (South Head C. G. Stn.)	The Meteorological Office	8	1 2	81	29·9	31·98	225	165
Nosshead	Com'rs. of N. Lighthouses	5	0 9	129	25·1	28·65	..	146
3.—THURSO & C. 238 sq. mi.								
D Altnabreac	Mr. G. MacLennan	5	1 0	500	34·4	35·56	225	170
D Thurso (Buckies)	J. H. M. Davidson, Esq.	5	0 1	240	39·0	43·29	215	200
Thurso (Holburn Head)	Com'rs. of N. Lighthouses	5	0 8	68	32·0	19·23?	..	..
Dunnet Head	Com'rs. of N. Lighthouses	5	1 0	331	30·2	34·38	236	182
Duncansby Head	Com'rs. of N. Lighthouses	5	..	196	31·4	30·78	..	156
4.—FORSS & C. 104 sq. mi.								
D Reay (The Manse)	Rev. Dugald Carmichael	9	1 0	49	36·2	38·24	259	187
5.—INSULAR. 1 sq. mi.								
Stroma	Com'rs. of N. Lighthouses	5	3 0	54	25·5	29·96	195	184
ORKNEY. (Area, 389 sq. mi.).								
Pentland, Skerries Lighthouse	Com'rs. of N. Lighthouses	5	3 0	70	..	30·32	243	156
Hoy (Cantickhead)	Com'rs. of N. Lighthouses	5	3 10	68	*35·5*	37·85	..	154
Hoy (Graemsay Sound, High)	Com'rs. of N. Lighthouses	5	1 4	29	*35·9*	38·51	264	187
Hoy (Graemsay Sound, Low)	Com'rs. of N. Lighthouses	8	4 4	40	*36·7*	41·96	227	189
D Pomona (Deerness)	The Meteorological Office	5	1 0	160	35·4	35·56	239	171
D Kirkwall (Bignold Park)	J. Davidson, Esq.	5	1 0	113	..	39·12	236	173
Hellyar Holm	Com'rs. of N. Lighthouses	5	1 3	35	..	37·67	266	187
Auskerry	Com'rs. of N. Lighthouses	5	1 0	22	..	32·80	233	189
Shapinsay (Balfour Castle)	Mr. W. Liddell	5	0 6	50	*31·6*	37·50	..	..
Sandwick School	J. A. Fotheringham, Esq.	5	1 4	51	..	(37·34)	..	..
Sanday (Start Point)	Com'rs. of N. Lighthouses	5	1 0	27	*32·3*	41·71	257	206
North Ronaldshay	Com'rs. of N. Lighthouses	5	0 9	22	..	40·09	251	213
SHETLAND. (Area, 558 sq. mi.).								
D Lerwick (Ft. Charlotte)	The Meteorological Office	8	1 0	54	..	42·13	238	205
D Lerwick Observatory)	(+A)The Meteorological Office	8	1 0	269	..	40·06	257	196
Eshaness	Com'rs. of N Lighthouses		..	..	..	34·93	200	181
D Bixter (Vementry)	Andrew Tait, Esq.	5	1 1	25	..	38·44	245	200
Unst (Baltasound, Halligarth)	Dr. T. E. Saxby	5	1 0	31	..	41·42	294	204

IRELAND.

DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CORK. (Area, 2873 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 79 sq. mi.								
2.—DINGLE BAY. 4 sq. mi.								
3.—KENMARE & C. 47 sq. mi.								
4.—BANTRY BAY. 197 sq. mi.								
Bantry House	Mrs. Shelswell-White	5	1 0	25	*57·2*	62·45	..	..
D Garinish Island	M. Mackenzie, Esq.	5	1 0	24	*70·4*	72·21	215	189
5.—DUNMANUS BAY. 57 sq. mi.								
6.—BANDON & C. 694 sq. mi.								
D Toormoor (Altar Rectory)	Rev. R. J. Colthurst	5	0 10	60	..	56·89	219	189
D Castle Townshend (GlenBarrahane)	Sir M. P. Coghill, Bt.	5	1 3	100	*44·7*	49·54	208	164
D Castle Townshend (Seafield)	Major H. Chavasse	5	1 0	40	*47·6*	52·46	200	164
D Skibbereen (Hollybrook Farm)	Capt. C. M. Morgan	8	1 6	60	*53·6*	64·22	203	185
D Caheragh (The Rectory)	Rev. A. W. Whitley	5	1 0	98	*56·7*	60·54	212	177
D Clonakilty (Shannon Vale Ho.)	T. J. Bennett, Esq.	5	1 3	135	*42·9*	52·16	205	180
D Kinsale (Scilly House)	J. J. Orr, Esq., M.D	5	1 0	62	*38·5*	46·59	199	157
D Kinsale (Nohoval Rectory)	Rev. H. Hadden	5	..	272	*39·0*	44·89	183	151
D Dunmanway (The Rectory)	Rev. Canon A. Wilson	5	1 6	205	61·0	63·75	226	180
7.—CORK HARBOUR. 726 sq. mi.								
D Cork (University College). (+A)	Prof. H. N. Walsh	5	1 0	65	40·0	47·91	198	165
D Cork (Wellington Road)	R. C. Sikes, Esq., C.E.	5	2 2	120	*40·3*	48·56	197	162
D Midleton (Ballinacurra)	J. H. Bennett, Esq.	8	1 0	24	40·4	43·66	200	164
D Glanmire (Lota Lodge)..No. 1	A.F.Sharman-Crawford,Esq.	5	1 0	200	42·6	49·69	208	168
8.—WOMANAGH & C. 118 sq. mi.								
D Roches Point	The Meteorological Office	8	1 0	22	41·9	52·75	211	182
D Shanagarry (Kinoith)	Miss L. P. Strangman	5	1 0	75	*35·2*	45·14	192	155
9.—BLACKWATER. 922 sq. mi.								
D Mallow (Longueville)	R. E. Longfield, Esq.	5	1 0	310	37·3	45·51	236	177
Mallow (Hazlewood)	E. McLysaght, Esq.	5	1 0	360	*39·5*	45·82	211	191
Kanturk (Castlecor)	Mrs. Norton Barry	..	..	..	*37·6*	46·65	246	191
10.—SUIR. 3 sq. mi.								
11.—INSULAR. 26 sq. mi.								

DIVISION XX.—MUNSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1930: Rainfall.	1930: Days with ·01 in. or more.	1930: Days with ·04 in. or more.
KERRY. (Area, 1851 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 372 sq. mi.								
2.—TRALEE BAY & C. 221 sq. mi.								
3.—DINGLE BAY. 789 sq. mi.								
D Cahirciveen (Valentia Obs.) (+A)	The Meteorological Office	8	1 0	30	55·7	65·43	253	200
M Gap of Dunloe (Gearhameen)	The Meteorological Office	8	3 0	75	*91·6*	103·00	..	..
Killarney (Muckross Garden)	A. R. Vincent, Esq.	..	..	100	*56·6*	75·10	..	..
Killarney (Muckross Lawn)	A. R. Vincent, Esq.	..	..	100	*56·8*	73·60	..	..
d Killarney (Flesk Mills)	J. Lawlor, Esq.	8	2 6	96	*54·9*	(60·99)	..	..
D Killarney (Mental Hospital)	E. W. Griffin, Esq., M.D.	5	1 2	173	54·7	(61·00)	238	196
D Killarney (Lakeview)	Capt. Sir M. O'Connell, Bt., M.C.	5	1 0	120	*55·5*	62·83	221	187
Killorglin (Callinafercy)	Maj. M. R. Leeson-Marshall.	5	1 0	40	*51·9*	56·64	..	203
d Bally McElligott Rectory	Rev. G. Maxwell	5	0 11	20	..	48·74	(237)	(201)
4.—KENMARE & C. 426 sq. mi.								
D Darrynane Abbey	Miss M. O'Connell	5	1 0	13	51·0	62·13	246	210
d Kilgarvan (Inchimore)	Prof. H. N. Walsh	5	1 0	470	*105·0*	115·69	..	..
D Kenmare (Dromore Castle)	Lt.-Col. E. Hood	5	1 4	90	*65·1*	74·21	259	223
D Kenmare (Sheen Falls)	Marquess of Lansdowne	5	0 5	25	*65·6*	73·64	258	208
5.—BLACKWATER. 30 sq. mi.								
6.—INSULAR. 13 sq. mi.								
WATERFORD. (Area, 715 sq. mi.)								
1.—BLACKWATER. 243 sq. mi.								
2.—COLLIGAN & C. 259 sq. mi.								
d Dunmore East	W. Lloyd, Esq.	5	1 1	20	..	41·80	..	..
D Kilmacthomas (Comragh Ho.)	Miss M. Fairholme	5	1 0	350	..	61·97	214	179
3.—SUIR. 213 sq. mi.								
D Knockaderry Reservoir (No. 2)	D. Sheedy, Esq.	5	1 0	248	*41·3*	59·00	214	157
D Waterford (Brook Lodge)	Miss Bolton	5	1 0	104	39·5	44·87	204	166
D Waterford (Gortmore)	Mrs. N. H. White	5	1 2	137	38·9	46·77	221	163
D Portlaw (Mayfield)	Mr. M. Sheehan	8	0 10	25	43·1	54·06	196	158
D Carrick-on-Suir (Seskin)	Louis Grubb, Esq.	8	1 0	535	*45·0*	52·38	227	173
TIPPERARY. (Area, 1660 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 582 sq. mi.								
D Nenagh (Traverston)	Miss A. H. Norris	5	1 0	333	*45·2*	55·85	273	205
D Killaloe (Ballina)	Office of Public Works	5	1 0	126	*47·4*	54·18	239	203
D Nenagh (Castle Lough)	S. Parker-Hutchinson, Esq.	5	1 3	120	39·5	47·77	221	182
d Borrisokane	Electricity Supply Board	5	1 10	200	..	39·20	..	172
Terryglass (Old Court)	M. D. Hickie, Esq.	5	1 0	150	*34·5*	37·76	236	176
Terryglass (Slevoyre)	B.-Gen. C. J. Hickie, C.M.G.	8	1 0	143	*31·9*	37·10	228	160

DIVISION XX.—MUNSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
TIPPERARY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—BLACKWATER. 21 sq. mi.								
3.—SUIR. 965 sq. mi.								
Clonmel (Coolgreany)	Mrs. J. Crean*	8	1 0	100	*37·9*	48·28	..	..
D Cahir (Abbey)	Mrs. W. Rochfort	5	1 0	160	39·2	46·11	226	181
D Cashel (Ballinamona)	E. W. M. Murphy, Esq	5	1 0	262	36·8	46·50	234	179
d Templemore (Barnane)	Capt. A. Carden, R.A.	5	1 0	650	*46·0*	50·83	..	200
Clonoulty (Corbally)	A. Moyniham, Esq.*	5	1 0	386	..	45·50	..	..
4.—BARROW—Nore. 92 sq. mi.								
D Roscrea (Timoney Park)	S. Parker-Hutchinson, Esq..	5	1 0	475	*36·2*	42·27	212	177
LIMERICK. (Area, 1040 sq. mi.)								
1.—SHANNON—Right Bank Tributaries. 7 sq. mi.								
2.—SHANNON—Left Bank Tributaries. 944 sq. mi.								
d Abbeyfeale (Springmount Sch.)	J. F. O'Kelly, Esq	5	1 0	360	*41·1*	49·49	..	172
D Knocklong (Kilfrush)	Mrs. Gubbins	5	1 0	312	*37·8*	47·71	239	196
D Ballingarry Presbytery	Rev. Thomas Hogan	5	1 0	308	..	41·87	(230)	(182)
D Foynes (Coolnanes)	Lord Monteagle	5	1 0	50	39·7	45·76	229	186
D Foynes (National School)	W. Purtill, Esq	5	2 8	15	*39·5*	43·09	219	178
D Limerick (Mulgrave Street)	Messrs. W. J. Shaw & Sons..	5	1 1	60	*38·5*	46·65	224	189
D Limerick (Boat Club)	W. J. C. Horne, Esq	5	1 0	50	*38·6*	48·63	237	186
D Castleconnell Rectory	Rev. Canon L. G. Davis	5	1 0	88	*41·2*	46·02	221	177
3.—BLACKWATER. 64 sq. mi.								
4.—SUIR. 25 sq. mi.								
CLARE. (Area, 1270 sq. mi.)								
1.—GALWAY BAY, SOUTH. 100 sq. mi.								
2.—MAL BAY & C. 294 sq. mi.								
Kilkee (Marine Parade)	R. N. Griffin, Esq	5	1 6	50	*41·8*	49·53	..	..
D Inagh (Mount Callan)	Capt. R. G. Tottenham	5	1 0	479	*67·2*	66·48	210	199
3.—SHANNON—Right Bank Tributaries. 854 sq. mi.								
d Dromoland Castle	Dowager Lady Inchiquin	5	1 6	45	*40·0*	(46·77)	..	..
D Broadford (Hurdlestown)	Lt.-Col. W. A. Bentley	5	1 0	167	*39·7*	49·46	239	195
D Tuamgraney (Raheen Ho.)	E. MacLysaght, Esq	5	40 0	230	*41·9*	50·41	216	191
4.—INSULAR. 22 sq. mi.								

* *Per* Irish Rainfall Association.

DIVISION XXI.—LEINSTER.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WEXFORD. (Area, 902 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—BARROW. 43 sq. mi.								
2.—OWENDUFF & C. 240 sq. mi.								
D Foulks Mills (Longraigue)	Miss J. Deane	5	1 1	220	39·3	51·01	216	182
3.—SLANEY & C. 467 sq. mi.								
D Johnstown Castle	Lady Maurice Fitzgerald	5	1 0	201	*37·0*	51·15	215	183
D Enniscorthy (Monksgrange)	Goddard H. Orpen, Esq.	5	1 0	565	*49·0*	61·53	247	190
Enniscorthy (Woodbrook)	E. C. Blacker, Esq.	5	1 0	370	*48·8*	66·86	235	..
4.—OWENAVORRAGH & C. 146 sq. mi.								
D Gorey (Courtown House)	Earl of Courtown	5	3 0	60	34·7	45·56	215	155
d Gorey (Ram's Gate)	Lt.-Cmdr.A.C.L.Ellis,R.N.R.	5	4 2	170	..	47·36	181	154
5.—OVOCA & C. 6 sq. mi.								
KILKENNY. (Area, 798 sq. mi.)								
1.—SUIR. 162 sq. mi.								
2.—BARROW—Nore. 527 sq. mi.								
D Kilkenny Castle	Earl of Ossory	8	1 6	182	33·1	39·53	225	169
D Castlecomer House	Capt. R. H. Prior-Wandesforde	5	1 0	380	*39·6*	47·89	210	171
3.—BARROW. 109 sq. mi.								
D Goresbridge (Barraghcore)	Miss M. Fleming	5	1 0	130	*32·1*	40·49	230	168
WICKLOW. (Area, 781 sq. mi.)								
1.—BARROW. 12 sq. mi.								
2.—SLANEY. 200 sq. mi.								
D Shillelagh (Coollattin Gardens)	Mr. F. W. Cox	5	0 9	383	41·9	54·01	204	182
3.—OVOCA & C. 241 sq. mi.								
D Rathdrum (Avondale)	A. C. Forbes, Esq.	5	1 0	400	*41·5*	55·77	204	167
4.—VARTRY & C. 193 sq. mi.								
D Rathnew (Clonmannon)	R. H. S. Truell, Esq.	5	1 6	27	*33·1*	45·96	218	153
D Roundwood (Vartry Lodge)	Dublin Corporation	5	1 3	720	*45·0*	52·90	225	175
Roundwood	Dublin Corporation*	5	1 8	750	*44·6*	51·52	..	..
D Newcastle (Killadreenan)	Dr. C. Denys Hanan	8	1 2	256	*36·0*	45·76	211	158
D Delgany (Elsinore)	Miss N. G. Moore	8	1 4	260	..	50·58	213	162
D Greystones (Burnaby Lodge)	Capt. C. H. West	5	1 0	95	..	45·85	209	146
5.—LIFFEY & C. 135 sq. mi.								
D Blessington Rectory	Rev. W. Reeves Scully	5	0 8	670	*38·0*	47·41	256	195

* *Per* Irish Rainfall Association.

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
CARLOW. (Area, 346 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—BARROW—Nore. 9 sq. mi.								
2.—BARROW. 216 sq. mi.								
D Bagnalstown (Fenagh House)	D.R.P.Beresford,Esq.O.B.E.	5	1 0	340	34·9	44·18	219	166
D Carlow (Belmont)	Capt. E. M. Thomas	5	1 0	191	*34·8*	45·23	199	166
D Carlow (Browne's Hill)	Brig.-Gen. R. Browne Clayton	5	1 0	291	34·1	40·83	253	158
3.—SLANEY. 121 sq. mi.								
d Rathvilly (Lisnavagh Gardens)	C. E. Faulkner, Esq.	5	2 6	400	*36·9*	(46·83)	..	..
D Hacketstown Rectory	Rev. C. S. S. Ellison	5	1 6	590	39·5	53·17	257	193
LEIX (QUEEN'S CO.) (Area, 664 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 25 sq. mi.								
2.—BARROW—Nore. 339 sq. mi.								
D Abbey Leix (Blandsfort)	Mrs. Hum Bland	5	1 6	532	36·5	46·51	235	194
D Mountrath (Baunreagh)	A. C. Forbes, Esq.	5	1 0	810	*54·2*	65·72	220	202
3.—BARROW. 300 sq. mi.								
D Mountmellick (Summer Grove)	W. A. Robinson, Esq.	5	1 0	252	*38·5*	44·46	243	187
OFFALY (KING'S CO.) (Area, 772 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 560 sq. mi.								
D Birr Castle	Earl of Rosse	8	1 0	175	32·6	38·23	228	171
D Meelick (Victoria Lock)	Office of Public Works	5	1 0	121	*29·9*	36·88	229	161
d Banagher	Electricity Supply Board	5	..	130	*30·8*	40·33	..	173
D Tullamore (St. Vincent's Hosp.)	Dr. G. A. Moorhead	5	1 0	225	*32·6*	42·72	277	179
d Ferbane (Turraun Peat Works)	Leinster Carbonizing Co.	8	1 2	165	*32·5*	36·52	..	170
D Ballycumber (Bellair Ho.)	Mrs. F. B. Mulock	5	..	290	*33·9*	40·42	215	180
2.—BARROW—Nore. 5 sq. mi.								
3.—BARROW. 156 sq. mi.								
Edenderry (Tubberdaly Ho.)	J. Murphy, Esq.	5	1 0	330	*33·5*	41·07	..	..
4.—BOYNE. 51 sq. mi.								
KILDARE. (Area, 654 sq. mi.)								
1.—BARROW. 332 sq. mi.								
D Athy (Cromaboo Bridge)	Office of Public Works	5	0 11	185	..	34·05	199	149
D Monasterevin (Pass Bridge)	Office of Public Works	5	0 8	208	..	38·84	218	174
2.—LIFFEY. 246 sq. mi.								
D Straffan House	F. B. Barton, Esq.	5	1 0	256	31·4	39·59	219	177
d Clongowes Wood College	Rev. C. H. Barrett, S.J.	8	1 4	246	*30·2*	(37·97)	(223)	(176)
3.—BOYNE. 76 sq. mi.								

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
DUBLIN. (Area, 354 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—VARTRY & C. 23 sq. mi.								
D Shankill (Sherrington)	Lt.-Col. J. C. W. Erck	5	1 0	115	*29·6*	43·42	194	161
Carrickmines (Claremount)	John O. B. Read, Esq	5	0 11	300	*30·6*	41·67	..	..
D Killiney (Rathleigh)	H. R. Maunsell, Esq	5	3 6	..	*28·1*	41·59	193	146
2.—LIFFEY & C. 188 sq. mi.								
‡D Stillorgan (Vartry Res.)	Dublin Corporation	5	1 4	278	*28·0*	39·11	203	169
D Stillorgan (Farmleigh)	T. Jackson, Esq	5	1 1	220	*32·8*	41·96	250	181
D Kingstown (Harbour Office)	Office of Public Works	8	1 0	52	..	37·36	210	163
D Kingstown (Harbour Yard)	Office of Public Works	8	1 0	52	*28·3*	39·04	196	158
D Kingstown (Tivoli Terr. S.)	Capt. L. B. Meredeth	5	1 0	131	..	36·62	187	144
Kingstown (People's Park)	Dr. T. J. Lydon	8	1 6	25	..	(34·82)	..	..
d Rathfarnham Castle	Rev. P. J. Howatson, S.J.	8	1 0	175	*28·4*	38·46	(220)	(167)
D Belgard Castle	Capt. A. F. Maude	5	1 6	400	*27·2*	35·70	207	160
D Rathmines (Neville Road)	T. H. Mason, Esq	5	1 0	100	*28·0*	39·80	197	169
D Donnybrook (Anglesea Road)	F. C. D. Joynt, Esq	5	1 0	30	*27·9*	40·68	201	159
D Dublin (FitzWilliam Square)	Sir J. W. Moore, M.D.	8	1 6	54	27·4	35·89	217	161
D Dublin (Ringsend Pumpg. Stn.)	G. S. Harty, Esq., C.E.	10	1 1	25	*26·3*	35·03	223	160
D Dublin (Trinity College)	R. W. Ditchburn, Esq	8	1 0	12	26·1	34·38	208	154
D Dublin (Phœnix Park)	Ordnance Survey Office	8	1 0	155	27·6	38·66	210	171
D Lucan (Peamount San.)	Medical Officer	5	5 9	366	*27·2*	34·78	204	164
D Clontarf (Pumping Station)	G. S. Harty, Esq., C.E.	5	1 0	5	*24·4*	36·10	215	145
D Glasnevin (Botanic Gardens)	The Director	8	1 0	55	27·9	37·84	225	161
D Howth Castle	J.Gaisford St.Lawrence, Esq.	5	1 9	35	*28·7*	38·24	211	156
3.—NANNY, DELVIN & C. 142 sq. mi.								
D Malahide (Seamount)	J. G. Jameson, Esq	5	1 0	150	*28·0*	41·86	202	171
Malahide (St. Andrews)	Ven. Archd'con T. S. Lindsay.	5	1 3	100	*27·7*	36·24	..	..
D Lusk (Nevitt)	W. Monks, Esq	5	1 0	139	*29·2*	36·82	236	156
D Skerries (Milverton Hall)	Capt. E. G. Woods	5	1 0	190	*28·0*	39·57	210	156
D Balbriggan (Ardgillan)...No.1	Capt. E. R. Taylor	5	1 0	210	29·0	38·50	228	154
4.—INSULAR. 1 sq. mi.								
D Lambay Island	Lord Revelstoke	5	1 0	20	*27·4*	37·72	191	153
MEATH. (Area, 909 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 32 sq. mi.								
2.—LIFFEY & C. 72 sq. mi.								
D Dunboyne (Stirling, Clonee)	Mr. J. Pilkington	8	1 0	231	*33·3*	37·75	215	175
3.—NANNY, DELVIN & C. 150 sq. mi.								
4.—BOYNE. 560 sq. mi.								
D Summerhill House	Mr. W. Lauder	5	1 0	372	*33·7*	40·33	223	180
Dunsany Castle Gardens	Mr. J. B. Pow	5	1 0	323	*33·8*	37·54	227	183
D Athboy (Frankville)	Mrs. C. P. Coghill	8	1 3	227	*35·5*	50·28	224	212
D Beauparc (St. Cloud)	W. J. Hopkins, Esq	5	1 0	215	*31·5*	40·52	231	181
D Kells (Headfort)	The Marquis of Headfort	5	1 0	227	37·0	43·05	224	165
5.—DUNDALK BAY. 95 sq. mi.								

‡ Gauge overexposed.

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
WESTMEATH. (Area, 712 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 517 sq. mi.								
D Athlone	Office of Public Works	5	1 0	132	*28·2*	37·72	206	170
Athlone (Twyford House)	J. P. Hodson, Esq.*	5	1 0	187	37·0	40·91	225	..
D Streamstown (Windmill)	H. A. S. Upton, Esq	5	1 6	..	*34·5*	40·10	223	196
D Moate (Coolatore)	H. A. S. Upton, Esq	5	1 6	369	*36·0*	37·26	251	186
D Mullingar (Belvedere House)	Mr. G. W. Roberts	5	1 0	367	36·3	43·10	221	177
d Mullingar (Ballynegall Gardens)	Major Hawkesworth Smyth.	5	1 3	340	*39·0*	48·80	..	170
D Rathowen (Cromlyn) (R)	Maj.-Gen.T.P.Battersby,C.B.	8	1 6	298	*36·1*	42·36	243	179
D Castlepollard (Pakenham Hall)	The Earl of Longford	5	3 0	..	*36·6*	42·66	249	186
2.—BOYNE. 195 sq. mi.								
LOUTH. (Area, 316 sq. mi.)								
1.—BOYNE. 32 sq. mi.								
2.—DUNDALK BAY & C. 284 sq. mi.								
D Dundalk Rectory	Rev. T. F. Campbell	5	1 0	10	*30·8*	36·30	222	149
Dundalk (Ballymacallet Mt.)	M. Sellars, Esq., C.E.	5	2 3	670	*41·5*	52·03	..	..
D Dundalk (Aughneskea Res.)	M. Sellars, Esq., C.E.	5	1 3	207	*38·3*	45·19	203	167
3.—CARLINGFORD LOUGH. 20 sq. mi.								
D Greenore	S. Wilson, Esq	5	1 0	20	31·9	32·32	192	141
LONGFORD. (Area, 424 sq. mi.)								
1.—ERNE. 61 sq. mi.								
2.—SHANNON—Left Bank Tributaries. 363 sq. mi.								
D Ballymahon (New Castle)	Col. W. A. King-Harman	5	1 0	200	*36·7*	39·46	228	174
D Keenagh	Electricity Supply Board	5	1 6	..	..	36·89	203	160
Longford (The Rectory)	Rev. H. Justice	5	1 0	185	*37·8*	42·04	234	189
D Cloondrah	Office of Public Works	5	1 0	132	*31·5*	36·75	254	169
D Castle Forbes Gardens	The Earl of Granard	8	1 0	161	37·6	39·91	213	190
D Gaigue School	P. Duignan, Esq	5	1 9	390	..	41·98	225	184

DIVISION XXII.—CONNAUGHT.

GALWAY. (Area, 2377 sq. mi.)

1.—ERIFF & C. 141 sq. mi.

2.—GALWAY BAY NORTH. 277 sq. mi.

3.—CORRIB. 846 sq. mi.

D Galway (Grammar School)	The Headmaster	5	1 0	50	*41·1*	41·54	258	181
D Ballynahinch Castle	H.H.Maharaja of Nawanagar	5	1 9	41	61·0	75·90	249	228
D Portumna	Electricity Supply Board	5	2 2	..	..	36·00	194	166

4.—GALWAY BAY, SOUTH. 281 sq. mi.

* *Per* Irish Rainfall Association.

DIVISION XXII.—CONNAUGHT—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
GALWAY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—SHANNON—Right Bank Tributaries. 803 sq. mi.								
D Ballinasloe B.N.S.	Electricity Supply Board...	5	..	150	*36·7*	38·46	201	163
D Ahascragh (Clonbrock)..(*new g*)	...The Hon. Miss Dillon.....	5	1 0	198	41·6	46·14	213	181
D Mt. Bellew B.N.S.	Electricity Supply Board...	5	1 8	200	..	49·50	240	197
d Glenamaddy	Electricity Supply Board...	5	2 0	..	..	(43·61)	..	155
6.—INSULAR. 29 sq. mi.								
ROSCOMMON. (Area, 961 sq. mi.)								
1.—SLIGO BAY. 6 sq. mi.								
2.—MOY. 11 sq. mi.								
3.—CORRIB. 16 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 928 sq. mi.								
d Ballymacurly (Highlake)	Electricity Supply Board...	5	1 9	350	..	44·02	..	..
d Roscommon	Electricity Supply Board...	..	..	..	..	(35·60)	..	181
d Lanesborough	Electricity Supply Board...	5	1 6	140	..	37·47	..	..
D Strokestown (Castlenode)	W. J. Walpole, Esq.....	5	1 0	160	35·0	41·41	221	181
D Tulsk	Electricity Supply Board...	5	2 0	250	..	43·79	209	181
d Boyle	Electricity Supply Board...	5	1 0	200	..	38·92	..	..
d Keadew	Electricity Supply Board...	5	3 0	170	..	43·74	..	..
MAYO. (Area, 2149 sq. mi.)								
1.—SLIGO BAY. 10 sq. mi.								
2.—MOY & C. 797 sq. mi.								
D Castlebar Rectory	Rev. J. Jackson.....	5	1 0	145	*50·0*	57·01	249	222
3.—BLACKSOD BAY & C. 411 sq. mi.								
D Blacksod Point	Meteorological Office.....	8	1 0	10	49·7	58·38	255	205
4.—CLEW BAY. 254 sq. mi.								
D Westport House	The Marquess of Sligo.....	5	1 0	35	46·6	(52·61)	243	204
D Mallarany	M. C. Forbes, Esq.....	5	1 0	120	*59·8*	63·28	249	229
5.—ERIFF & C. 121 sq. mi.								
D Aasleagh Rectory	Rev. F. T. Cockle.....	5	1 0	30	*89·0*	98·18	250	222
D Aasleagh House	The Marquess of Sligo.....	5	1 0	30	*87·0*	107·24	252	223
D Delphi Lodge	The Marquess of Sligo.....	5	1 0	110	*99·0*	109·54	262	237
6.—CORRIB. 432 sq. mi.								
Tourmakeady (Drimbawn Ho.)	Capt. E. G. Woods.....	5	1 0	100	*54·0*	59·80	250	178
7.—SHANNON—Right Bank Tributaries. 35 sq. mi.								
8.—INSULAR. 89 sq. mi.								
SLIGO. (Area, 716 sq. mi.)								
1.—DROWES & C. 49 sq. mi.								

DIVISION XXII.—CONNAUGHT—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
SLIGO—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—SLIGO BAY. 444 sq. mi.								
D Collooney (Markree Obsy.)	Major Cooper	5	1 0	122	*43·5*	48·49	249	212
D Sligo (Ard-na-veagh)	R. J. Kirwan, Esq., C.E.	5	1 0	90	*41·5*	48·89	247	206
3.—MOY & C. 166 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 56 sq. mi.								
5.—INSULAR. 1 sq. mi.								
LEITRIM. (Area, 615 sq. mi.)								
1.—ERNE. 152 sq. mi.								
2.—DROWES & C. 85 sq. mi.								
3.—SLIGO BAY. 135 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 47 sq. mi.								
D Drumkeeran (Leckawn)	Electricity Supply Board	5	1 5	350	*52·0*	60·32	217	201
5.—SHANNON—Left Bank Tributaries. 196 sq. mi.								
D Ruskey	Office of Public Works	5	1 0	141	*31·3*	33·56	220	206
d Drumshanbo (Lough Allen Sluice)	Office of Public Works	5	1 0	169	*36·6*	35·19?	241	..

DIVISION XXIII.—ULSTER.

CAVAN. (Area, 753 sq. mi.)								
1.—ERNE. 489 sq. mi.								
D Crossdoney (Kevit Castle)	E. P. Smith, Esq.	5	1 0	211	*35·5*	42·53	221	184
D Belturbet (Cloverhill)	Miss M. L. Gee	5	1 0	202	34·6	34·91	240	172
2.—SHANNON—Right Bank Tributaries. 34 sq. mi.								
d Glangevlin	Electricity Supply Board	5	1 10	600	*60·0*	63·68	..	..
3.—SHANNON—Left Bank Tributaries. 91 sq. mi.								
4.—BOYNE. 122 sq. mi.								
5.—DUNDALK BAY. 17 sq. mi.								
FERMANAGH. (Area, 713 sq. mi.)								
1.—ERNE. 667 sq. mi.								
D Newtownbutler (Crom Castle)	G. R. J. Corbett, Esq.	5	1 1	200	..	41·28	255	184
D Enniskillen (Castle Coole)	Lady Dorothy Lowry-Corry.	5	1 0	240	*41·0*	42·54	246	180
Enniskillen (Technical School)	J. W. Mansfield, Esq.	5	0 10	165	..	44·61	..	..
d Enniskillen (Portora School)	W. McDonald Porter, Esq.	5	1 0	251	*40·3*	39·85	..	..
d Belleek (Heronshaw)	T. Beacom, Esq.	5	1 2	150	*45·5*	49·48	235	209
2.—DROWES & C. 46 sq. mi.								
MONAGHAN. (Area, 498 sq. mi.)								
1.—ERNE. 208 sq. mi.								
2.—DUNDALK BAY. 132 sq. mi.								

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
MONAGHAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—BANN—Lough Neagh, West. 158 sq. mi.								
D Monaghan (Workhouse)	Dr. J. Campbell Hall	5	1 0	240	*31·4*	39·69	249	184
ARMAGH. (Area, 514 sq. mi.)								
1.—DUNDALK BAY. 118 sq. mi.								
Crossmaglen (Anamar)	P. Norris, Esq	5	1 1	384	*36·2*	41·93	198	170
2.—CARLINGFORD LOUGH. 23 sq. mi.								
D Bessbrook (The Woodhouse)	J. S. W. Richardson, Esq.	5	1 0	260	*37·2*	44·40	236	174
3.—BANN—Lough Neagh, East. 37 sq. mi.								
D Lurgan (Belle Vue) *new g*	S. A. Bell, Esq., J.P.	5	1 0	200	29·7	33·47	213	162
4.—BANN, UPPER. 144 sq. mi.								
5.—BANN—Lough Neagh, West. 192 sq. mi.								
D Armagh Observatory (+A)	The Meteorological Office	8	1 0	204	31·7	34·68	219	166
d Richhill (Sandymount)	Mrs. C. B. Lamb	5	1 6	200	*29·3*	37·45	..	154
DOWN. (Area, 961 sq. mi.)								
1.—CARLINGFORD LOUGH. 104 sq. mi.								
D Newry (Bridge Street House)	C. Blaney, Esq	5	1 0	23	38·1	43·42	194	162
2.—DUNDRUM BAY & C. 173 sq. mi.								
D Silent Valley (Belfast W.W.) *new g*	C. F. Wheeler, Esq., C.E.	5	1 0	426	..	57·48	214	177
D Annalong (Belfast W.W.)	C. F. Wheeler, Esq., C.E.	5	2 9	435	*47·5*	62·28	257	190
d Mourne Mount'ns (Fofanny Res.)	J. H. H. Swiney, Esq., C.E.	5	1 0	938	*64·4*	87·04	..	188
D Seaforde	T. W. Forde, Esq.	8	0 5	180	38·3	42·45	213	174
3.—STRANGFORD LOUGH. 260 sq. mi.								
D Strangford	G. L. Hildebrand, Esq.	5	0 8	30	..	38·14	182	150
D Saintfield House	Rev. E. H. Blackwood-Price.	5	0 9	300	*34·9*	41·72	246	163
4.—COAST STREAMS. 47 sq. mi.								
D Donaghadee (Coastguard Stat.)	The Meteorological Office	8	1 0	40	31·3	34·85	223	152
D Donaghadee (Craigmore)	Dr. S. B. Coates	5	1 0	60	*30·6*	33·55	214	142
5.—BELFAST LOUGH. 206 sq. mi.								
Annaghanoon	W. J. Gibson, Esq.	5	1 0	200	..	35·88	..	..
D Waringstown (The Forge)	W. J. Gibson, Esq.	5	1 0	187	*32·2*	36·12	234	171
Bangor (Chorlton)	C. T. Ingold, Esq.	7	1 6	60	*33·2*	33·01	..	..
6.—BANN—Lough Neagh, East. 7 sq. mi.								
7.—BANN, UPPER. 162 sq. mi.								
Banbridge (Observatory)	H. D. Fleming, Esq.	5	1 6	210	*32·1*	37·45	210	152
D Banbridge (Milltown)	J. E. Kennedy, Esq.	5	1 0	200	31·0	34·58	234	156
D Portadown (Moyallon House)	Mr. J. Eccles	5	0 7	130	*32·6*	34·65	218	164
8.—INSULAR. 2 sq. mi.								

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
ANTRIM. (Area, 1193 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—BELFAST LOUGH. 107 sq. mi.								
d Lisburn (Friend's School)	J. Woolman, Esq.	8	1 6	208	*35·0*	36·99	..	..
D Lambeg (Glenmore House)	Linen Industry Res. Assn.	8	0 11	100	..	38·70	209	168
D Dunmurry (Warren House)	Col. H. R. Charley	5	0 10	110	..	41·24	238	173
D Belfast (Queen's University)	J. A. Badger, Esq.	5	1 0	62	34·6	39·07	208	156
D Belfast (Royal Acad. Inst.)	J. W. Darbyshire, Esq.	5	1 0	13	..	40·30	209	164
Belfast (Sewage Works)	R. B. Donald, Esq., C.E.	8	1 0	26	*35·8*	37·43	..	..
D Belfast (Cave Hill Road)	Miss C. Firth	5	1 0	200	*40·2*	42·00	244	181
Belfast (Oldpark Filters) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 6	203	*38·3*	44·03	..	..
D Belfast (Oldpark Filters) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	203	..	45·35	223	175
D Whiteabbey (Knockinagh)	H. M. B. Chisholm, Esq.	5	1 0	200	*36·5*	41·95	219	177
‡D Carrickfergus (Dorisland) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	250	..	39·74	218	171
Carrickfergus (S. Woodburn) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 0	640	*41·9*	45·62	..	..
D Carrickfergus (S. Woodburn) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	640	..	47·67	222	176
Carrickfergus (N. Woodburn) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 0	737	*45·4*	45·38	..	..
D Carrickfergus (N. Woodburn) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	735	..	47·50	222	182
Carrickfergus (Copeland) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 0	424	*37·7*	39·05	..	..
D Carrickfergus (Copeland) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	427	..	42·85	230	187
Carrickfergus (L. Mourne) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 0	596	*42·0*	43·35	..	..
D Carrickfergus (L. Mourne) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	596	..	45·52	226	180
2.—GLENARM & C. 186 sq. mi.								
D Larne (Sallagh Springs)	J. H. H. Swiney, Esq., C.E.	5	1 0	566	*50·0*	53·55	211	191
D Glenarm Castle	Mr. T. Daly	5	1 4	30	*44·6*	52·79	213	195
3.—BUSH & C. 193 sq. mi.								
d Ballycastle (Magherintemple)	Capt. J. Casement, D.S.O.	5	1 0	230	42·6	45·59	..	..
4.—BANN, LOWER. 112 sq. mi.								
5.—BANN—Lough Neagh, East. 590 sq. mi.								
Stoneyford (Belfast W.W.) *old g.*	C. F. Wheeler, Esq., C.E.	5	1 6	450	*35·7*	38·73	..	..
D Stoneyford (Belfast W.W.) *new g.*	C. F. Wheeler, Esq., C.E.	5	1 0	453	..	41·63	202	174
D Aldergrove Aerodrome (+A)	The Meteorological Office	8	1 0	238	*34·0*	37·70	223	170
D Randalstown (Hollybrook)	N. F. Webb, Esq.	5	1 0	120	..	41·52	231	175
D Ballymena (Harryville)	J. R. Williams, Esq.	5	1 5	150	41·5	44·59	228	190
D Broughshane (Tullymore Sch.)	E. W. Thomson, Esq.	5	1 2	218	*41·0*	44·26	200	168
D Broughshane (Quolie)	H. O'Hara, Esq., C.E.	5	1 3	864	*47·3*	51·41	243	192
6.—INSULAR. 5 sq. mi.								
LONDONDERRY. (Area, 816 sq. mi.)								
1.—LOUGH SWILLY. 6 sq. mi.								
D Londonderry (Dunruadh)	J. H. Welch, Esq.	5	1 0	150	*40·5*	43·79	238	183
2.—BUSH & C. 9 sq. mi.								
3.—BANN, LOWER. 240 sq. mi.								
D Coleraine (Cutts House)	Maxwell Given, Esq., C.E.	8	1 0	20	*39·6*	42·14	232	179
4.—BANN—Lough Neagh West. 196 sq. mi.								

‡ Gauge overexposed.

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1930. Rainfall.	1930. Days with ·01 in. or more.	1930. Days with ·04 in. or more.
5.—FOYLE & C. 365 sq. mi.		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
M Glenedra (Spelhoagh Mountain)	W. Criswell, Esq., C.E.	5	1 0	1333	*60·0*	72·61	..	..
d Glenedra Hill	W. Criswell, Esq., C.E.	5	1 0	1333	*62·5*	70·00	..	..
d Glenedra Lodge (+A)	W. Criswell, Esq., C.E.	5	1 0	950	*55·6*	64·82	..	..
‡M Glenedra (Altagarran Mountain)	W. Criswell, Esq., C.E.	5	1 0	1230	..	65·01	..	..
Altnaheglish (Glack Burn)	W. Criswell, Esq., C.E.	5	1 0	967	..	57·57	..	..
D Londonderry (Creggan Res.)	Mr. W. Hutchinson	8	1 0	325	41·8	46·92	278	214
D Limavady (Roevista Manse)	Rev. W. Browne	5	1 0	70	*37·0*	33·20	204	161
Limavady (Drenagh)	M. M. McCausland, Esq.	5	1 6	80	37·0	34·45	224	167
Bellarena	Sir F. G. Heygate, Bt.	5	4 0	12	*38·4*	36·82	212	188
TYRONE. (Area, 1257 sq. mi.)								
1.—ERNE. 46 sq. mi.								
2.—BANN—Lough Neagh, West. 442 sq. mi.								
D Dungannon (Aloha)	Major R. Stevenson	5	1 0	275	*37·2*	45·30	228	181
D Castlecaulfield (Parkanaur)	Y. A. Burges, Esq.	8	4 6	250	..	49·39	226	177
d Donaghmore	late D. Brown, Esq.	5	1 3	260	*40·0*	45·60	..	173
3.—FOYLE. 769 sq. mi.								
D Omagh (Edenfell)	Lt.-Col. J. B. Buchanan	8	1 0	280	40·1	44·18	245	191
D Newtown Stewart (Barons Ct.)	Robert Bell, Esq.	5	1 0	250	43·0	41·97	249	185
D Sion Mills (Sion House)	Capt. J. C. Herdman	5	1 0	100	*39·0*	44·45	237	187
d Strabane	Mrs. Redman	5	0 11	70	..	(40·55)	..	..
DONEGAL. (Area, 1875 sq. mi.)								
1.—DONAGH & C. 146 sq. mi.								
D Malin Head *old g*	The Meteorological Office	8	1 3	51	..	38·96	232	186
2.—LOUGH SWILLY. 273 sq. mi.								
d Rathmullen (Fort Royal)	Col. J. H. Jellett	5	1 4	35	*42·5*	46·39	..	..
D Buncrana Rectory	Rev. R. P. Meredith	5	1 0	50	..	46·23	236	192
3.—SHEEPHAVEN & C. 307 sq. mi.								
D Milford (The Manse)	Rev. W. J. Young	5	1 3	150	*42·0*	45·27	249	192
D Dunfanaghy (St. Patrick's)	W. T. Arnold, Esq.	..	..	..	*43·0*	41·18	263	202
4.—GWEEBARRA & C. 341 sq. mi.								
5.—DONEGAL BAY. 322 sq. mi.								
D Killybegs (Rockmount)	Com. G. G. Phillips, R.N.	5	1 0	65	*60·5*	52·25	243	203
6.—ERNE. 68 sq. mi.								
7.—DROWES & C. 10 sq. mi.								
8.—FOYLE. 396 sq. mi.								
9.—INSULAR. 12 sq. mi.								

‡ Gauge overexposed on moor.

BRITISH RAINFALL
1930

PART IV

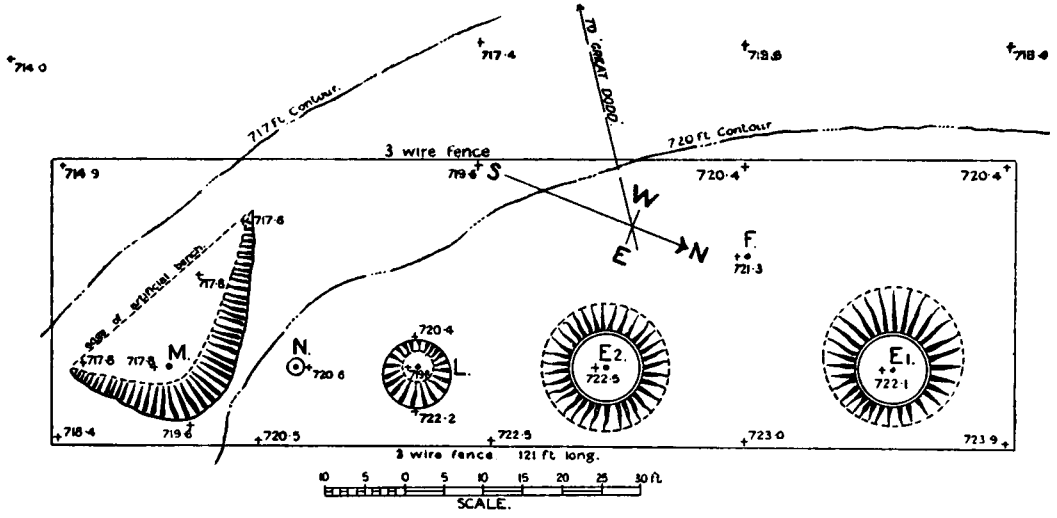
REPORT ON EXPERIMENTS WITH RAIN-GAUGE SHIELDS IN EXPOSED POSITIONS DURING THE PERIOD 1st MAY, 1930, TO 30th APRIL, 1931, AT HUTTON JOHN, PENRITH.

By F. Hudleston, M.Inst.C.E.

The experiments with shielded rain-gauges in exposed positions, of which detailed descriptions have appeared in *British Rainfall* for the four years 1926 to 1929, have been continued for another 12 months in the manner described below.

The three rain-gauges under the lee of Kilnflatt Wood were removed in November, 1930, as we had by then obtained ample information about the sheltering effect of various ratios of height to distance, and the gauges were transferred to the western enclosure on Kilnflatt Hill, which was lengthened to take them as shown in the plan Fig. 1. In Fig. 2 are given a number of vertical cross sections of the sheltering devices adopted.

Contoured maps and cross sections of the hill have appeared in the former numbers of *British Rainfall*, and they are not repeated in this volume.



WESTERN ENCLOSURE ON KILNFLATT HILL.
NOVEMBER, 28, 1930.

Fig. 1

The seven devices have been functioning together since December 18th, 1930, and their records for the period between that date and April 30th, 1931, as well as those of four other normally exposed gauges, are summarised in Table 1.

Gauge A is the standard gauge at the old established site in the gardens to the east of Hutton John. It is 5 yards west of a retaining

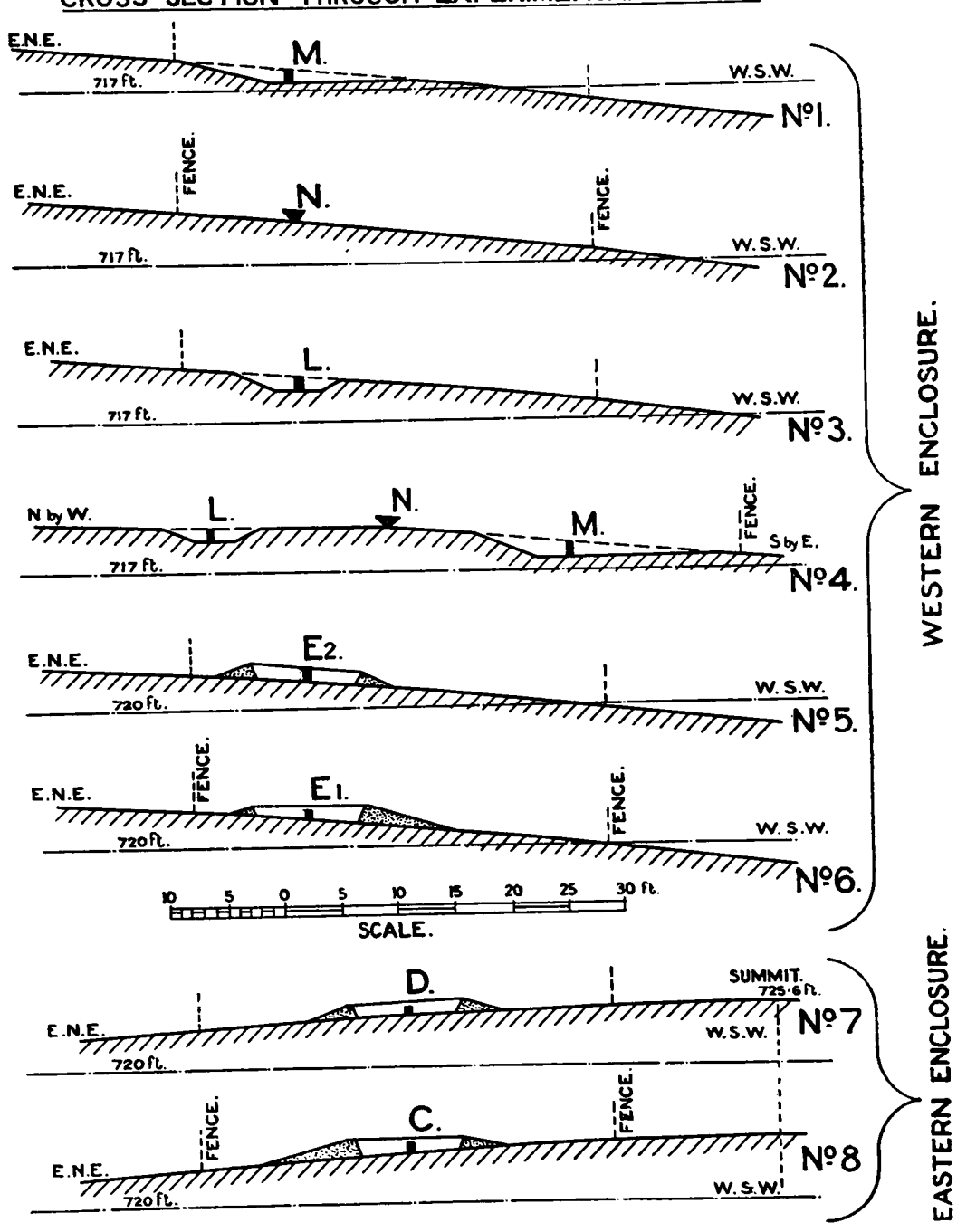


Fig. 2

wall 7 ft. high, which divides the lower lying park land, on the east from the gardens. Gauges B, C and D are in the eastern

enclosure, just east of the summit of Kilnflatt Hill. B is normally exposed, C (No. 8, Fig. 2) has a turf wall round it of 10 ft. diameter with the crest of its crater level and 2 inches above the level of the lip of the gauge. The outer grass slope is at 1 in 4. Last year the turf wall round C had an outer slope of 1 in 3, while its crater edge was 6 inches above the level of the gauge top, and as shown on p. 292 of *British Rainfall*, 1929, the gauge was then definitely over-sheltered in all high winds. D (No. 7, Fig. 2) is unchanged, its turf wall is 15 inches high, its outer slopes are at 1 in 3, and the lip of its crater is parallel to the surface of the ground, which at this spot, slopes about 3 inches towards the east in the 10 ft. diameter of the circular wall. This wall has been unchanged since 1926, consequently D's records are the most continuous of any of the sheltered gauges and form an excellent basis for comparison.

The western enclosure is now 40 yards long, and contains 6 gauges, arranged as shown in Fig. 1. Gauge F is normally exposed and unchanged since 1926. The turf wall of E_2 (No. 5, Fig. 2) has been the same since May, 1928, *i.e.* the plane of the crater edge passes through the lip of the gauge, and is parallel to the slope of the hillside, so that its western edge is $4\frac{1}{2}$ inches *below* the level of the lip of the gauge, while its eastern edge is $4\frac{1}{2}$ inches *above* that level. The wall round E_1 (No. 6, Fig. 2) is exactly level, and is now 2 inches above the level of the lip of the gauge. Last year the crater edge of E_1 was level with the lip of the gauge. The outer grass slopes of the turf walls of E_1 and E_2 are at a slope of 1 in 3. The other three gauges L, M and N form an entirely new installation. Gauge L is in a pit such as Buchan recommended many years ago, and the lip of this gauge is in the plane of the hillside (cross-section No. 3, Fig. 2). Gauge M is on an artificially levelled bench on the hillside, and its lip, like that of L, is in the plane of the hillside (cross-section No. 1, Fig. 2). Gauge N (cross-section No. 2, Fig. 2) is a normal gauge, with its lip 12 inches above the ground level, but it is surrounded by a Nipher shield of galvanised sheet iron, made to the same shape as the shield sketched on p. 284 of *British Rainfall*, 1920, in the paper by the late Carle Salter. The Nipher shield was tested at Eskdalemuir Observatory during the three years 1921 to 1923, with results that were distinctly against the invention, and this winter, readings on Kilnflatt Hill have corroborated the records of Eskdalemuir, and, as will be seen later, the Nipher shield has failed to show any perceptible difference in its catches from those of a bare gauge, *i.e.* a normally exposed one. Gauge J on the hillside under the lee of the hill, and 10 ft. 6 inches below the top of the hill, is normally exposed, and is exactly as it has been since November, 1928.

Table 1 summarises the catches in seven double lines (*a*) to (*g*). Notice the upper line in each case gives the catches in inches, while the italics of the lower line gives the catches as percentages

Summary of Catches from 18th December, 1930, to 30th April, 1931 (134 days in all).

NOTE.—The italic figures are the percentages of A's catches.

Description of catches.	No. of Days.	Check Gauge	Western Enclosure.						Eastern Enclosure.			Close to the Wood.	Direction and Force of Wind.
		A	E_1	E_2	F	L	M	N	B	C	D	J	
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
(*a*) A southerly gale on 28th Dec., 1930.	1	1·74 *100*	1·52 *87*	1·50 *86*	1·46 *84*	1·45 *83*	1·42 *81*	1·33 *76*	1·69 *98*	1·69 *98*	1·69 *98*	1·60 *96*	South, but not exceeding Force 6.
(*b*) Snow turning to rain on 31st Jan., 1931	1	0·60 *100*	1·18 *198*	1·05 *175*	0·40 *67*	0·80 *133*	0·44 *73*	0·48 *80*	0·46 *76*	1·19 *199*	1·14 *191*	0·53 *88*	S.E. veering to S. but not exceeding Force 3.
(*c*) Rain, sleet and snow on 13th March, 1931.	1	0·62 *100*	0·64 *103*	0·64 *103*	0·62 *99*	0·63 *101*	0·62 *100*	0·60 *97*	0·65 *104*	0·67 *107*	0·67 *107*	0·64 *103*	S.W. but not exceeding Force 3 or 4.
(*d*) Rain with "fresh to strong" Westerly wind.	7	3·23 *100*	2·57 *80*	2·63 *81*	2·32 *72*	2·72 *84*	2·44 *75*	2·31 *72*	3·01 *93*	3·18 *98*	3·15 *97*	3·24 *100*	Westerly winds of velocity not exceeding 25 m.p.h.
(*e*) Rain with "high" Westerly winds.	7	3·71 *100*	2·60 *70*	2·76 *74*	2·33 *63*	2·97 *80*	2·70 *72*	2·56 *69*	3·38 *91*	3·68 *99*	3·51 *95*	3·88 *105*	Westerly winds of velocity up to 40 m.p.h.
(*f*) Precipitation on all other days.	72	8·41 *100*	8·11 *96*	8·09 *96*	7·35 *87*	8·12 *96*	7·62 *91*	7·47 *89*	8·16 *97*	8·72 *104*	8·75 *104*	8·49 *101*	Light winds from all points of the compass.
(*g*) Total precipitation for the period.	89	18·31 *100*	16·62 *91*	16·67 *91*	14·48 *79*	16·69 *91*	15·24 *83*	14·75 *81*	17·35 *95*	19·13 *104*	18·91 *103*	18·38 *100*	

of A's catch. Line (*a*) gives the results of rain during a southerly gale on December 28th, 1930, when the wind blew along the line of gauges from N to E_1 in the western enclosure, and from D to C in the eastern enclosure, while J lost the sheltering effect of the hill. It is noticeable that the bare gauges B and F were catching as much as the gauges round them, for they were, in fact, partially sheltered by the devices round those neighbouring gauges. The cross-section No. 4, Fig. 2, shows how a southerly wind would meet the three gauges M, N and L ; the steep slope between M and N would intensify the turbulence round N with such a wind, and we find that N has far the smallest catch of the lot on this occasion.

Line (*b*) gives the catches of January 31st, 1931, the only day this winter when I had a considerable fall of snow, but unfortunately at 5 p.m. the *snow* turned to *rain*, and thus confused the resulting catches. I did, however, melt the catch in gauge A at that hour, and found ·31 in. in its bottle, which may fairly be assumed to be *all snow*, but the ·29 in. that I found in A's bottle at 9 a.m. on February 1st was probably almost entirely *rain*, and if we assume that every gauge caught about ·25 in. of *rain* that night we should get the following approximate table for *snow* catches :—

	A	E_2	E_1	F	L	M	N	B	C	D	J	Wind.
Catch in inches..	·35	·93	·80	·15	·55	·19	·23	·21	·94	·91	·28	SEto S.
Per cent. of A...	*100*	*266*	*230*	*43*	*157*	*54*	*66*	*60*	*268*	*260*	*80*	Force 3 to 5.

This table gives relative catches of much the same order as those enumerated in lines (*b*), (*m*) and (*n*) of the table on p. 294 of *British Rainfall*, 1929, for all the experimental gauges except L, M and N which were not in existence at that time. We can, however, see that M and N are not very different from the two bare gauges F and B, while the Buchan gauge L deserves special notice. I found this pit in the afternoon of January 31st had filled up with snow, until the lip of the gauge was actually level with the surface of the snow, and it appeared to be put out of action with the strong wind then blowing, but the lips of the turf walled gauges were still 5 or 6 inches above the snow in their craters. I am inclined to regard this as good evidence that a Buchan pit does, in fact, mitigate turbulence round a rain-gauge even more than a turf wall does, but it has a very definite disadvantage on a level plain, when compared with a turf wall, in that it is hardly possible to drain a pit with sloping sides of the rain it collects off those sides, and I have frequently found a pool of water 4 or 5 inches deep round gauge L when I have gone to measure its

catch. Now the turf walled enclosures do not hold water, while the catching capacities of their gauges are shown by this table to be practically equal to those of the Buchan pit L, and I still pin my faith on the turf wall as the most practical arrangement in exposed positions when the ground is approximately level. But on a steep hillside, the case is altered, for it would there be easy to drain the pit by a few yards of common drain pipes.

Lines (*d*) and (*e*) of Table 1 show the pit to have a definite advantage over the turf walls in high winds, and although the grand totals in line (*g*) are practically identical for gauges E_1, E_2 and L, we can see from lines (*a*) and (*b*) that the abnormal catches of those two days account for nearly half an inch of the totals of E_1 and E_2 in line (*g*), so that gauge L has, in fact, proved itself the best of the lot in the western enclosure so far as *rain* is concerned.

Line (*c*), an example of a rough day in March, shows the turf walls catching a good deal more than their neighbours, probably because some of the precipitation was in the form of snow.

Line (*d*) gives the total catches for 7 days of westerly winds up to, but not exceeding, 25 m.p.h., while line (*e*) gives the 7 roughest days of the winter, 1930-31, and on only one of those days, *viz.*, January 15th, 1931, did I get anything that might truly be termed a "whole gale." It gave the following catches, which bear fairly close comparison with those on p. 292 of *British Rainfall*, 1929, for the gale on December 29th, 1929 :—

	A	E_1	E_2	F	L	M	N	B	C	D	J	Wind.
Inches	·16	·09	·11	·07	·12	·09	·08	·14	·15	·15	·17	W. & up to Force 8.
Per cent. of A.	*100*	*57*	*68*	*41*	*75*	*58*	*47*	*88*	*94*	*94*	*107*	

In this record E_1 is far below E_2, whereas on December 29th, 1929, it was 5 per cent. better than E_2, and it would seem as if the added 2 inches to the crest of the turf wall has *over-sheltered* gauge E_1 in the same way as the 6 inches added to C's turf wall in the winter 1929-30, which is dealt with in some detail on p. 292 of *British Rainfall*, 1929, and is specially evidenced in the table at the foot of that page.

We also find in the two lines (*d*) and (*e*) that E_1 is rapidly falling back behind E_2 as the wind increases, whereas a year ago E_1 was persistently ahead of E_2, and I am led to hope that we are approaching finality as regards the question whether the crest of a turf wall should be made level or parallel to the surface of the ground.

The cross-sections No. 5 and 6, Fig. 2, show that the streamline of a strong wind from W.S.W. must be deflected upwards by the slopes of these turf walls, since they are in effect two miniature hillsides up which the wind must blow. Now we have ample proof from the catches of gauge J that a strong wind carries many drops of rain over the summit of Kilnflatt Hill, which after they have travelled 50 yards fall into that gauge, but they have been carried over the gauges C and D, which are some 10 yards to leeward of the summit of the hill, and have the lips of their funnels at almost exactly the same level as the ground of the summit. It seems, therefore, fairly obvious that at gauges E_1 and E_2 there must be a similar tendency for a strong wind to lift and transport small drops of rain over these two gauges, and such a tendency would apparently be more marked at E_1 than at E_2, since the obstruction offered to wind of the higher wall of E_1 must be greater than that offered by the wall of E_2. But the records on p. 296 of *British Rainfall*, 1929, and on p. 260 of *British Rainfall*, 1928, show that E_1 used to catch more than E_2, so that we seem to be driven to the conclusion that some other disturbing cause must exist at E_2 (concurrently with the uplifting tendency) which in 1930 to 1931 was of lesser relative magnitude to this uplift than in the two earlier winters. E_2 has caught more than E_1 ever since the wall round E_1 has been raised by two inches, and it seems obvious from lines (*d*) and (*e*) that the uplifting effect is increased as the wind attains greater velocity.

On p. 267 of *British Rainfall*, 1928, I referred to the greater turbulence I found inside the crater of E_2 as compared with that inside the crater of E_1, and I then attributed the lesser catches of E_2 to this turbulence, but it seems obvious that some other cause has *now* exceeded the turbulence inside the craters, and I can see at present no other cause than uplift of small rain drops.

If we consider cross-section No. 3, Fig. 2, through the pit gauge L, we find no such obstruction to streamlines of wind as those we have just considered, and since L's catches improve relatively to E_1 and E_2 as the wind gets stronger, it may be considered that no additional uplift beyond what may be caused by the whole hillside can be induced by the pit as here made.

The catches of J in lines (*d*) and (*e*) and on January 15th, 1931, indicate clearly that high winds carry much rain over the top of a hill and corroborate my remarks on p. 297 of *British Rainfall*, 1929.

The behaviour of the Nipher shield is interesting; its gauge N seems to have no advantage over the bare gauge F until the wind is above 25 m.p.h., when it at once forges ahead until, in a whole gale, it is nearly 15 per cent. better than the bare gauge, but it is always far behind E_1, E_2, L and even M, and I submit that the shield is a mistake.

Whenever I have had a fall of snow, with any wind at all, I have found the turf below the shield quite bare of snow, which points to definite turbulence caused by the inverted cone. Mr. P. F. Jarrold, at Eskdalemuir, ten years ago, observed the same effect, and in his report for December, 1921, he sketched the paths of snowflakes which he had observed with a light wind, and these paths interlace with each other in a manner which accounts for the absence of snow round the base of the gauge.

The level plane on which gauge M is placed was made on purpose to test the effect of a bench on a hillside, and M's catches show clearly that such a level bench does actually reduce the turbulence round a bare guage. But M is a long way behind E_1, E_2 and L, so that we can discard any idea of making an artificial bench on a hillside (which is a far more costly job than digging a pit like that round gauge L), although we have, in fact, obtained definite evidence of lessened turbulence on any ledge that may be found on a hillside.

The flatter outer slope of the turf wall round gauge C has definitely increased its catching capacity in strong winds over that of gauge D, and from line (*e*) we find this improvement becomes more marked as the force of the wind increases. The light winds in line (*f*) have pulled C's catch back to that of D, but the grand totals of line (*g*) show gauge C at the head of the list.

These two lines (*f*) and (*g*) are not, of course, quite comparable with the twelve months totals I used in my reports of 1928 and 1929, since they deal only with the winter months of 1930-31, but we can see that the bare gauge F_2 in the western enclosure, continues to indicate much greater turbulence on the hillside than exists round B, the bare gauge in the eastern enclosure, just over the summit of the hill.

It is not often given to a man to have near him a testing ground comparable with Kilnflatt Hill, and it is my present intention to continue these experiments for another year or two. The winter 1930-31 has been frosty and comparatively free from storms, for I have only had 14 days of westerly winds above 20 m.p.h. during the 134 days, when all these seven devices were functioning together, whereas in 1927-8 I had 80 such days. Another winter of that order might modify our conclusions regarding the sheltering of rain-gauges on exposed positions.

EXPERIMENTS ON THE SHIELDING OF RAIN-GAUGES AT LYMPNE AERODROME, NEAR HYTHE, KENT.

By JOHN GLASSPOOLE, M.Sc., Ph.D.

1. *Introduction.*

It is well-known that a rain-gauge, exposed in an unsheltered situation with the rim at the standard height of 1 foot above the ground, does not always receive a fair sample of the rainfall of the locality. This defect is most pronounced in wind-swept areas and is due to the wind eddies set up round the gauge. Of the various devices introduced to overcome this difficulty, both the turf wall and the Nipher shield[1] are themselves liable to produce eddies. The ideal device should reduce the speed of the wind over the gauge without introducing so much disturbance as to produce eddies. Buchan pointed out[2] that wire netting possessed the remarkable property of reducing the speed of the wind, and it seemed possible that a netting of suitable mesh and height could be found, which when set up at a suitable distance from the gauge, would deal effectively with the strong winds, by reducing their velocity to a *safe limit* without creating too much eddy motion.

The following extract is taken from Buchan's original paper :— " A wire screen, with meshes an inch or even an inch and a half apart, affords a protection, during very high winds, to flower pots placed on its lee side ; and so great is the resistance that such screens offer to the outward course of the wind, that at Rockville, near Linlithgow, a few years ago, one with meshes an inch and a half apart, and supported at short intervals by stout iron rods, was, together with its strong supports, blown over and bent down by a heavy gale of wind from an upright to a horizontal position."

An estimate of the safe limit, below which the effect of wind on the catch of a rain-gauge might be neglected, was made as a result of observations at Kew Observatory, on the velocity of the wind at the level of the rim of the gauge.[3] From these observations, under what might be considered ideal conditions for a rain-gauge, Col. E. Gold draws the conclusion, " that the exposure of a rain-gauge may be considered as sufficiently near the normal to require no artificial screening if the wind at the level of the rim of the gauge does not exceed 10 to 15 miles per hour."

---

[1] The turf wall used at Holyhead is described in *British Rainfall*, 1926, p. 282 ; an article on the Nipher shield is given in *British Rainfall*, 1920, pp. 278–285.

[2] J. Scottish Meteor. Soc. Vol. IV, pp. 146–9. *On a protecting wire screen for the rain-gauge.*

[3] *Wind at the Level of a Rain-gauge*, by Col. E. Gold, Meteorological Magazine, 1928, p. 39.

Another device for minimising wind-eddies is that of exposing the gauge in a pit so that the rim is one foot above the floor of the pit, but level with the surrounding ground. This was used at Calne and is described in *British Rainfall*, 1865. In this case there was evidence of insplashing from the ground into the gauge. In the experiments with a gauge in a pit at Valentia Observatory[1] some insplashing occurred initially, but subsequently, when the pit was enlarged[2] and the sides made vertical, no actual case of insplashing was noted. At the same time it is clear that a gauge where the rim is level with the ground is likely to catch rain, splashed up from the ground and carried by the wind.

2. *The exposures of the rain-gauges.*

In view of the uncertainty associated with a gauge in a pit and the difficulty of maintaining a pit unaltered, it became desirable to explore other methods of protection.[3] It was, therefore, decided to have experiments made at Lympne, where they would be under the direct supervision of one of the professional staff of the Meteorological Office, and to investigate the effect of wire netting screens and a pit simultaneously. In the experiments at Lympne comparative readings were made with gauges surrounded by wire screens of different heights and with a gauge in a pit.

The rain-gauges at Lympne were standard gauges, 5 inches in diameter and were set up on the flat top of a hill at about 350 feet above sea-level. Within three quarters of a mile to the south the land is practically at sea-level. The sea is only 2 or 3 miles away to the south and south-east, while to the south-west there is flat land (Romney Marsh and Warland Marsh) for some 10 miles. To the north and north-west Lympne is sheltered by a series of hills rising in places to 600 feet. The site is open to the south, the nearest object being an open spile fence (about $4\frac{1}{2}$ feet high and $36\frac{1}{2}$ feet to the north-east). As rain falls mainly with winds from the south and south-west the site is particularly suited for examining the effects of different types of exposure on the catch of a gauge. It should be emphasised that the ground in the immediate vicinity

---

[1] *Experiments on the Shielding of Rain-gauges*, by C. D. Stewart, Q.J.R. Meteor. Soc., 1926, p. 55.

[2] The gauge was exposed in a circular pit with vertical sides and with the rim of the gauge level with the ground and 2 feet 3 inches from the gauge. The pit was 1 foot deep.

[3] It will be recalled that a chestnut fence was tried at Portland Bill (see the *Meteorological Magazine*, 1927, 163–4). The site is a very open one and during strong winds it is possible that too little rain is recorded in the unprotected gauge. The fence set up round a second gauge was 3 feet 6 inches high with pales 5 inches apart, and enclosed a circle 30 feet in diameter, the rain-gauge being in the centre of the circle. The catch of the unprotected gauge and the gauge in the fence was practically identical, so that the chestnut fence had little effect and its use could not be regarded as satisfactory.

of the gauges is flat, *i.e.*, the gauges are on a plateau, and we are not concerned, in this investigation, with the effects due to sloping ground near the gauges.

The positions of the experimental gauges are shown in Fig. 1. The four gauges, A, B, C and D, were set up about 10 yards apart in a line from west-north-west to east-south-east. Each site is, therefore, equally open to the south-west, south and south-east. Each site is also equi-distant from the fence to the north-west and the fence itself runs a long distance from the ends of the row of

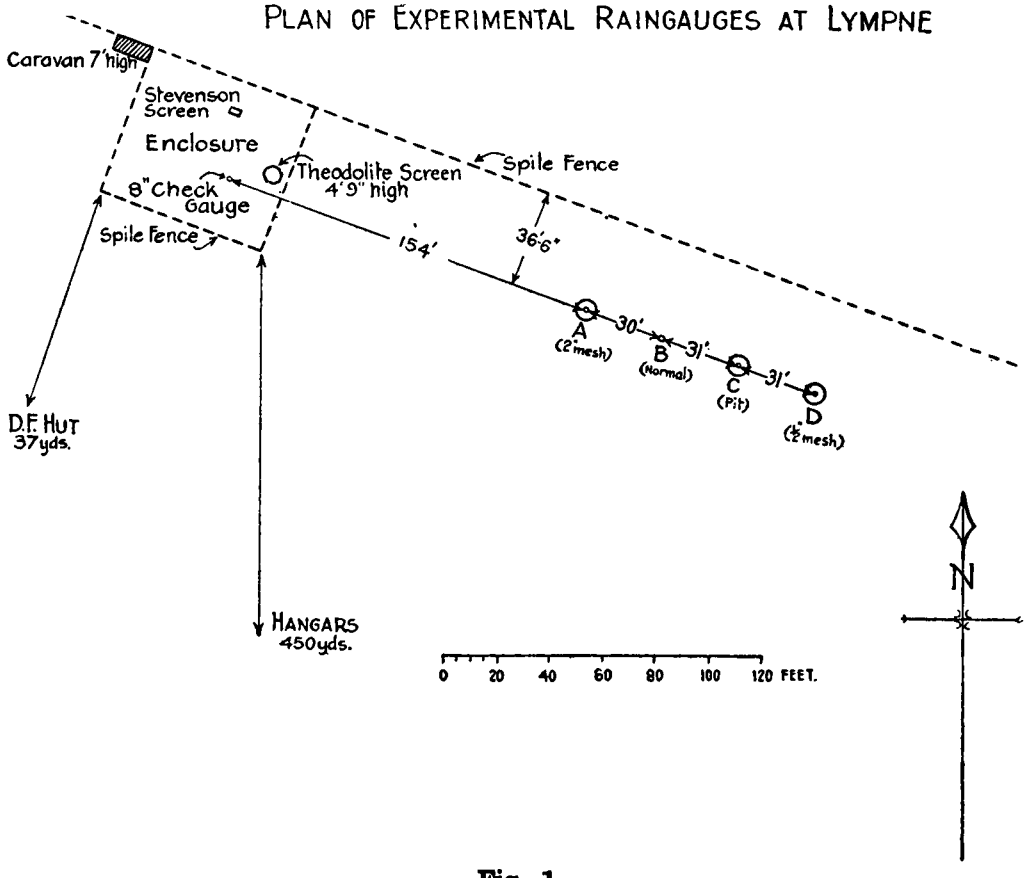


Fig. 1

gauges. The check gauge is in a spile fence enclosure about 18 yards square. It is 48 yards to the west-north-west of gauge A.

The site was selected by Col. E. Gold and Mr. R. Corless, in June, 1926, and the observations were carried out under the direction of Mr. R. M. Stanhope and Mr. G. J. W. Oddie. The following exposures were used for the four standard Meteorological Office 5-inch rain-gauges :—

Gauge A was surrounded by a circular 2-inch mesh wire netting 6 feet in diameter.

Gauge B was exposed in the normal manner.

Gauge C was placed in the centre of a pit 6 feet in diameter and 1 foot deep with vertical sides, the mouth of the gauge being at the general ground level. (This is similar to the pit used at Valentia Observatory, except that there the pit was 5 feet in diameter).

Gauge D was surrounded by a circular ½-inch mesh wire netting 6 feet in diameter.

The circular netting round gauges A and D was 6 feet in diameter. No variations were made in the diameter of the netting surrounding these gauges. In each case the netting was supported on iron rods ½-inch in diameter driven into the ground.

Observations were made from June 16th, 1926, to January 31st, 1927, with the wire screens around A and D 2 feet 6 inches in height, after which the screens were lowered to a height of 1 foot 6 inches and the observations continued until November 10th, 1929, when screens only 1 foot high were used until June 30th, 1930. Subsequently observations with gauges A and D were discontinued.

3. *Summary of observations.*

The gauges were examined and the contents measured daily at 6h. and 18h., except when rain was falling heavily at the time of observation. On these occasions the measurements were made as soon as possible after the heavy rain had ceased.

The total amounts caught by the four gauges, together with that recorded by the 8-inch check gauge in the enclosure, are set out in Table I. The values are expressed as percentages of the 8-inch gauge readings in Table II and also as percentages of the "normal" gauge readings in Table III.

TABLE I.

Period of Observations.	A. 2-in. mesh.	B. normal.	C. pit.	D. ½-in. mesh.	Check in enclosure.
	mm.	mm.	mm.	mm.	mm.
(*a*) June 16th, 1926, to Jan. 31st, 1927	A and D with wire screens 2 feet 6 inches high. 443·0	460·3	458·4	457·1	471·4
(*b*) Feb. 1st, 1927, to Nov. 10th, 1929	A and D with wire screens 1 foot 6 inches high. 2100·9	2153·0	2167·2	2112·5	2124·3
(*c*) Nov. 11th, 1929, to June 30th, 1930	A and D with wire screens 1 foot high. 610·4	620 4	642·0	597·7	610·0
TOTAL	3154·3	3233·7	3267·6	3167·3	3205·7

TABLE II.

	A.	B.	C.	D.	check
(*a*)	94·0	97·6	97·2	97·0	100·0
(*b*)	98·9	101·4	102·0	99·4	100·0
(*c*)	100·1	101·7	105·2	98·0	100·0
Total	98·4	100·9	101·9	98·8	100·0

TABLE III.

	A.	B.	C.	D.	check
(*a*)	96·2	100·0	99·6	99·3	102·4
(*b*)	97·6	100·0	100·7	98·1	98·7
(*c*)	98·4	100·0	103·5	96·3	98·3
Total	97·5	100·0	101·0	97·9	99·1

4. *Discussion of Results.*

(*a*) *Gauges surrounded by wire screens of different mesh and heights.* In considering these results it will be useful to have clearly in mind what it is that the netting screen is expected to do. We know from experience that an unsheltered gauge in a windswept locality receives too little rain. The loss is ascribed to eddies set up by the gauge itself, and these may be expected to increase with the wind velocity. What we need, then, is some device for reducing the wind velocity past the gauge without giving rise to turbulent motion. If this function is performed by the netting screen the catch of the gauge inside it will be higher than that of a gauge exposed in the ordinary way. The catch of the "netted" gauge may, however, be affected in other ways: it may be *increased* by raindrops caught by the netting and afterwards blown into the gauge; it may be *decreased* by the netting acting as a solid obstruction. The decrease from this cause may arise in two different ways; the wire may simply impede the free access of rain to the gauge, and it may also set up eddies. The action of the screen is therefore complex and we can only judge its effectiveness by comparing the amounts caught in the netted and "normal" gauges, using the check gauge as the basis of comparison. If we find that the "netted" gauges give catches agreeing closely with those of the check gauge while the catch in the over-exposed "normal" gauge does not, we may fairly conclude that the presence of the netting screen is advantageous.

In Table III, the catches in the different gauges are expressed as percentages of the catch in the "normal" gauge B. All the values for the screened gauges A and D are below 100 per cent. and it ay be concluded from these figures that none of the arrangements tried was effective. On the contrary, the presence of the screen was in each case disadvantageous.

There is one curious feature about the data. Looking at the figures for A, the gauge screened with 2 inch netting, it is seen that the catch relative to B, the normal gauge, increased from 96·2 to

98·4 per cent. as the height of the screen was reduced from 2 feet 6 inches to 1 foot. The opposite effect occurred with gauge D, screened with ½-inch netting. It is to be noted, however, that the variations in the catch of the pit Gauge C during the three periods were parallel to those of A. No changes were made in the pit gauge and it seems probable, therefore, that none of the differences in the three lines (*a*) (*b*) and (*c*) of Table III are significant.

(*b*) *Pit gauge C.*

For the whole period of observations the gauge in the pit caught 1·9 per cent. more than the check gauge and 1·0 per cent. more than gauge B. Curiously, the catch of the pit gauge has increased fairly steadily, both relatively to the check gauge and gauge B. This may possibly be due to a slight change in the level of the rim of the gauge in relation to the level of the surrounding ground. Thus an increase in the catch would be expected if the gauge had sunk an inch or so further into the ground, or if the grass had grown more vigorously and provided more shelter.[1] It is by no means certain, however, that the effect is not merely an apparent one due to casual " errors of sampling."

5. *A comparison of some individual readings.*

The actual readings for the five gauges were examined by the Meteorological Staff, at Lympne Aerodrome, for the period June 16th, 1926, to November 10th, 1929, along with the station anemograph and hyetograph records. The mean wind during the period of rain was determined and the results have been grouped according to the wind force deduced from the velocity records by the usual scale of equivalents. The mean values are set out in Table IV. In carrying out this analysis falls of less than 5 mm. were not considered.

These results confirm generally the conclusions reached from Tables II and III. The wire netting has little effect on the amount of the rain collected unless the wind force is greater than 5. For stronger winds the effect of the netting is to decrease the catch. The readings of the gauge C in the pit are in close agreement with those of the normally exposed gauge B.

In Table V, some noteworthy cases of large differences in the catch of the various gauges are set out, together with the values for

[1]In reply to an enquiry on this point, the observer at Lympne wrote as follows :—" The ' pit ' gauge has not sunk and the grass around the edge of the pit is kept down. Part of the pit wall occasionally falls in or has been trodden down (by sheep as well as by the observers) during wet weather, but steps are always taken to restore it to its original shape and size. The floor of the pit is level and the rim of the rain-gauge is one foot above it. The surrounding ground is not quite level, but the pit wall is at no point less than 11 or more than 13 inches high. The highest part of the wall is on the south side."

TABLE IV.

Gauge.	Exposure.	Percentage of catch of "normal" gauge (B).		
		Beaufort forces.		
		2 and 3.	4 and 5.	6 and 7.
		%	%	%
A ..	Netting screen 2 in. mesh, 2 ft. 6 in. high	97·7	98·4	91·0
A ..	Netting screen, 2 in. mesh, 1 ft. 6 in. high	98·9	98·8	97·5
B ..	Normal (unscreened) ..	100·0	100·0	100·0
C ..	Pit, 1 ft. deep	100·1	100·6	99·8
D ..	Netting screen, ½-in. mesh, 2 ft. 6 in. high	100·2	100·2	94·0
D ..	Netting screen, 1 in. mesh, 1 ft. 6 in. high	99·0	98·3	95·8

TABLE V.

	Date.	Time of measurement.	A.		B.	C.		D.		Wind	
			mm.	% of B.	mm.	mm.	% of B.	mm.	% of B.	Force	Direction.
Wire Screens 2ft. 6ins. high.	June 24, 1926 ..	1800	6·2	90	6·9	6·6	96	7·0	102	2–3	variable
	June 18, 1926 ..	0600	15·3	98	15·6	15·6	100	15·5	99	2–3	S.W.
	July 19, 1926 ..	0600	8·4	100	8·4	8·4	100	8·5	101	4–5	S.
	Sept. 27, 1926 ..	1800	4·8	100	4·8	5·0	104	5·1	106	4–5	W.
	Oct. 25, 1926 ..	0600	16·5	90	18·4	17·9	97	16·7	91	6–7	S.
	Nov. 5, 1926 ..	1800	5·8	88	6·6	6·4	97	5·6	85	6–7	S.
	Nov. 20, 1926 ..	1800	8·7	88	9·9	8·6	87	10·2	103	6–7	S.
	Nov. 14, 1926 ..	0600	7·9	99	8·0	8·2	103	7·7	96	6–7	S.
Wire Screens 1ft. 6ins. high.	Mar. 10, 1927 ..	1800	20·5	99	20·7	20·7	100	20·5	99	2–3	W.
	Sept. 17, 1927 ..	1800	11·5	96	12·0	11·4	95	11·6	97	2–3	S.W.
	July 7, 1927	0600	43·3	99	43·6	43·5	100	43·6	100	4–5	N.W.
	Aug. 20, 1927 ..	1800	12·8	93	13·7	13·7	100	13·0	95	4–5	S.
	Oct. 22, 1927 ..	1800	20·6	104	19·9	19·2	97	18·7	94	4–5	E.
	June 19, 1927 ..	0600	7·4	91	8·1	7·8	96	7·3	90	6–7	S.
	June 24, 1927 ..	1800	17·3	98	17·6	17·6	100	17·4	99	6–7	S.W.
	Sept. 23, 1927 ..	1800	7·2	100	7·2	7·0	97	6·3	87	6–7	S.
	Nov. 24, 1928 ..	0600	12·8	80	15·6	14·2	89	13·5	84	8–9	S.W.

similar winds, where the differences were small. The wind direction is included in the last column, but this appears to have no connection with these variations, as is to be expected from the open exposure of the gauges. The case of November 24th, 1928, is interesting as it is the only case available for winds of force greater than 7. It is remarkable that on this occasion the catch in the gauge in the pit was appreciably less than that in the normally exposed gauge B.

Table VI gives the cases in which the fall consisted of snow, or snow and sleet. The differences are here very large and variable, but in all cases the gauge C in a pit has collected more than any other.

TABLE VI.

Date.	Time of measurement.	A.		B.	C.		D.		Wind force.	Type of precipitation.
		mm.	% of B.	mm.	mm.	% of B.	mm.	% of B.		
December 23rd, 1926	0600	4·8	109	4·4	5·1	116	4·9	111	4–5	Snow and sleet
January 21st, 1927	1800	5·5	93	5·9	6·1	103	5·0	85	2–3	Snow and sleet.
March 11th, 1928	1800	2·4	86	2·8	3·6	132	3·4	121	4–5	Snow.
January 16th, 1929	1800	0·6	100	0·6	1·4	233	1·2	200	4–5	Snow.
January 15th, 1929	1800	1·5	88	1·7	2·1	124	0·8	47	4–5	Snow.

ON SOME MEASUREMENTS OF WIND VELOCITY AT THE LEVEL OF A RAIN-GAUGE.

It has long been recognised that wind is a very important factor in the measurement of rainfall. In the early days of the British Rainfall Organization a great deal of experimental work on this subject was carried out, a summary of which, by Mr. L. C. W. Bonacina[1], will be found in *British Rainfall*, 1906. It is unnecessary to recapitulate the details, but the outcome of these investigations was to show that if a gauge was unduly exposed to the wind, the catch was reduced. It is immaterial whether the undue exposure to the wind results from the absence of sheltering objects or from elevating the gauge at an unusual height. It is known that the wind speed ordinarily increases rapidly with height in the lowest layers of the atmosphere; consequently it is desirable that a rain-gauge should be placed so that its rim is as near to ground level as is convenient. Unless the gauge is placed in a pit, however, a limit to the reduction of height is set by the fact that the catch may be artificially increased by rain splashing into the gauge from the ground. It was judged that when a gauge was set up on a grass plot no appreciable insplashing occurred if the height of the rim was not less than one foot. It has, therefore, become standard practice to set up rain-gauges with their rims at a height of 1 foot, on level ground in situations where a certain amount of natural shelter is provided against winds from all directions. It is obviously necessary to avoid excessive sheltering, otherwise the catch will be reduced by screening in windy weather. As a working rule it is considered that the gauge should not be nearer to any sheltering object than a distance equal to twice the height of the object.

There is usually little difficulty in finding sites which comply with these requirements in suburban, urban and wooded inland areas. On moors and in exposed coastal regions it is, however, frequently impossible, or at least very difficult to avoid undue exposure to the wind. Devices such as turf walls and the Nipher shield[2] have been introduced for the purpose of correcting such over-exposure, and the problem of obtaining reliable measurements in really wind-swept situations, especially on hill sides, cannot yet

[1] "The Effects of Exposure to Wind upon the amount of Rain caught by Rain-gauges, and the Methods of Protecting Rain-gauges from them." L. C. W. Bonacina, *British Rainfall*, 1906, p. 27.

[2] See "The Nipher Rain-gauge Shield," by M. de C. S. Salter; *British Rainfall*, 1920, pp. 278–285.

be regarded as completely solved. A most valuable series of experiments in this connection has been made by Mr. F. Hudleston, at Hutton John, near Penrith[1], and reference may also be made to an article in this volume on experiments with wire netting screens at Lympne Aerodrome.

It is easy for an expert in rainfall work to recognise what is clearly a good site for a rain-gauge and also what is clearly an over-exposed site. There is, however, a large class of sites where doubt arises as to whether the gauge is over-exposed, and the need has been felt for some simple criterion for reaching a decision, as to whether artificial screening is necessary. There are also cases in which circumstances necessitate the gauge being placed with its rim above the standard height of 1 foot. From what has already been said on this subject it follows that the catch is not necessarily reduced in such circumstances. In an area which is as a whole well-sheltered from strong winds, one might assert with some confidence that the difference of the catches of two gauges, one at the standard height, the other at a height of three or four feet, would be inappreciable. The same assertion could certainly not be made in the case of gauges in a more exposed situation.

In an article entitled, "Wind at the Level of a Rain-gauge," in the *Meteorological Magazine* for March, 1928, Lt.-Col. E. Gold gives particulars of a case of a gauge in a well-sheltered situation at a greater height than the standard which occurred at Spurn Head. A gauge was set up in an enclosed yard at the lighthouse station. The yard was paved and to avoid the effects of insplashing the gauge was set up with its rim at a height of 4 feet. For the purpose of forming an idea as to whether the catch would be affected by the wind at this abnormal height it was decided to make some measurements of wind velocity at the level of the rim of the gauge. A small cup anemometer was used for this purpose and it was found that the wind velocity was about 25 per cent. of that recorded by the pressure-tube anemograph at the station, the height of which is 42 feet above ground. The highest velocity measured at the rain-gauge level was 11 miles per hour, at a time when the velocity recorded by the pressure-tube anemograph was 39 miles per hour.

In order to interpret these results it was necessary to make similar measurements at the level of a normally exposed rain-gauge on what is ordinarily regarded as a satisfactory site. This investigation was carried out at Kew Observatory, Richmond, Surrey. Here it was found that at one foot above ground the wind velocity varied from 25 to 40 per cent. of that measured by the pressure tube

[1] See *British Rainfall*, 1926, pp. 285–293; *British Rainfall*, 1927, pp. 288–290; *British Rainfall*, 1928, pp. 258–269; *British Rainfall*, 1929, pp. 288–298 and *British Rainfall*, 1930.

anemograph on the roof of the building. The highest velocity recorded at 1 foot was 10 miles per hour at a time when the pressure-tube anemograph recorded 28 miles per hour. These measurements indicated that the wind velocity at the level of the rain-gauge at Spurn Head was never likely seriously to exceed that at the level of the gauge with the normal exposure at Kew Observatory[1], and it seemed reasonable to conclude, therefore, that the exposure of the Spurn Head gauge could be regarded as satisfactory. Lt.-Col. Gold further concluded, "that the exposure of a rain-gauge may be considered as sufficiently near the normal to require no artificial screening if the wind at the level of the rim does not exceed 10 to 15 miles per hour. This must not be taken to imply that a wind of 10–15 miles per hour has no effect upon the catch of a rain-gauge —all that it means is that the effect is not great enough to render the records useless for comparison with the records from other gauges."

With a view to gaining further information on this important matter arrangements were made for wind measurements at rain-gauge level to be made at two additional stations: St. Anne's Head, Pembroke, and Lympne Aerodrome. At St. Anne's Head the gauge is at the Royal Naval Shore Signal Station and the rainfall readings taken there indicated that the gauge might be somewhat over-exposed. The readings were made under the supervision of the Chief Officer, H.M. Coastguard, who was asked to determine the run of the wind over periods of one hour on occasions of strong wind and to make estimates of the force of the wind on the Beaufort Scale at the beginning and end of each run. (The station is not equipped with a pressure-tube anemometer.) The results obtained at this station differed very markedly from those at Spurn Head and Kew Observatory. With the cups at 2 feet 6 inches above the ground, the speed frequently exceeded 30 m.p.h., and on one occasion, when the wind force was estimated as 9 to 10 on the Beaufort Scale, a reading of 55 m.p.h. was obtained. On lowering the anemometer to the normal rain-gauge height of 1 foot, the measured velocities were reduced, but readings of 20 to 25 m.p.h. were not uncommon when the wind force in the open was estimated at force 7. The measurements thus confirmed the impression that the rain-gauge was over-exposed.

At Lympne Aerodrome, a large number of readings were taken under the supervision of the Meteorologist-in-Charge, Mr. R. M. Stanhope. In each case the wind velocity as measured by the pressure-tube anemometer at a height of 70 feet above ground was

[1] As evidence that the effect of the wind on the catch of the rain-gauge is small, it should be mentioned that the rainfall record at Kew Observatory is in close agreement with that of other gauges in the district.

noted for comparison with the measurements made with the cup anemometer at 1 foot above ground. The results of 282 observations are summarised in the following table.

Wind force on Beaufort Scale.	Number of Obs.	Mean of all Obs. of speed at 1 foot.	Mean of all speeds measured by P.T. anemograph.	Values in Col. 3 expressed as percentages of values in col. 4.
Col. 1.	2.	3.	4.	5.
		m.p.h.	m.p.h.	%
Force 1 ..	1	0·0	2·0	0
„ 2 ..	34	2·0	6·1	33
„ 3 ..	80	4·0	9·8	41
„ 4 ..	70	5·8	15·0	39
„ 5 ..	23	6·7	21·2	31
„ 6 ..	50	11·3	27·7	41
„ 7 ..	17	14·1	33·8	42
„ 8 ..	7	16·1	41·6	39
Forces 1–8 ..	282	6·7	17·0	39

The highest speed measured at 1 foot above ground was 19·1 m.p.h. This reading occurred on the occasion of the severe gale of January 12th, 1930, when the pressure-tube anemometer was blown down.

The results obtained at Lympne indicate that the rain-gauge is slightly over-exposed, taking as a criterion the limit of 15 m.p.h. suggested by Lt.-Col. Gold. This view is confirmed by some comparisons made between readings of the standard gauge and a gauge exposed in a pit and described in the article entitled, " Experiments on the Shielding of Rain-gauges at Lympne Aerodrome, near Hythe, Kent," printed in this volume. It was found that the pit-gauge caught slightly more rain than the standard gauge, which is indicative of slight over-exposure of the standard gauge.

Taken as a whole, the results indicate that the measurement of wind velocity is a sound method of ascertaining whether a rain-gauge site is likely to give a deficient catch through over-exposure. It is not suggested that it is necessary on all occasions to apply the " wind test " to a proposed site—such a procedure would, indeed, be costly and impracticable—but it would obviously be useful to have such measurements made in the case of important stations, where there was reason to suspect over-exposure.

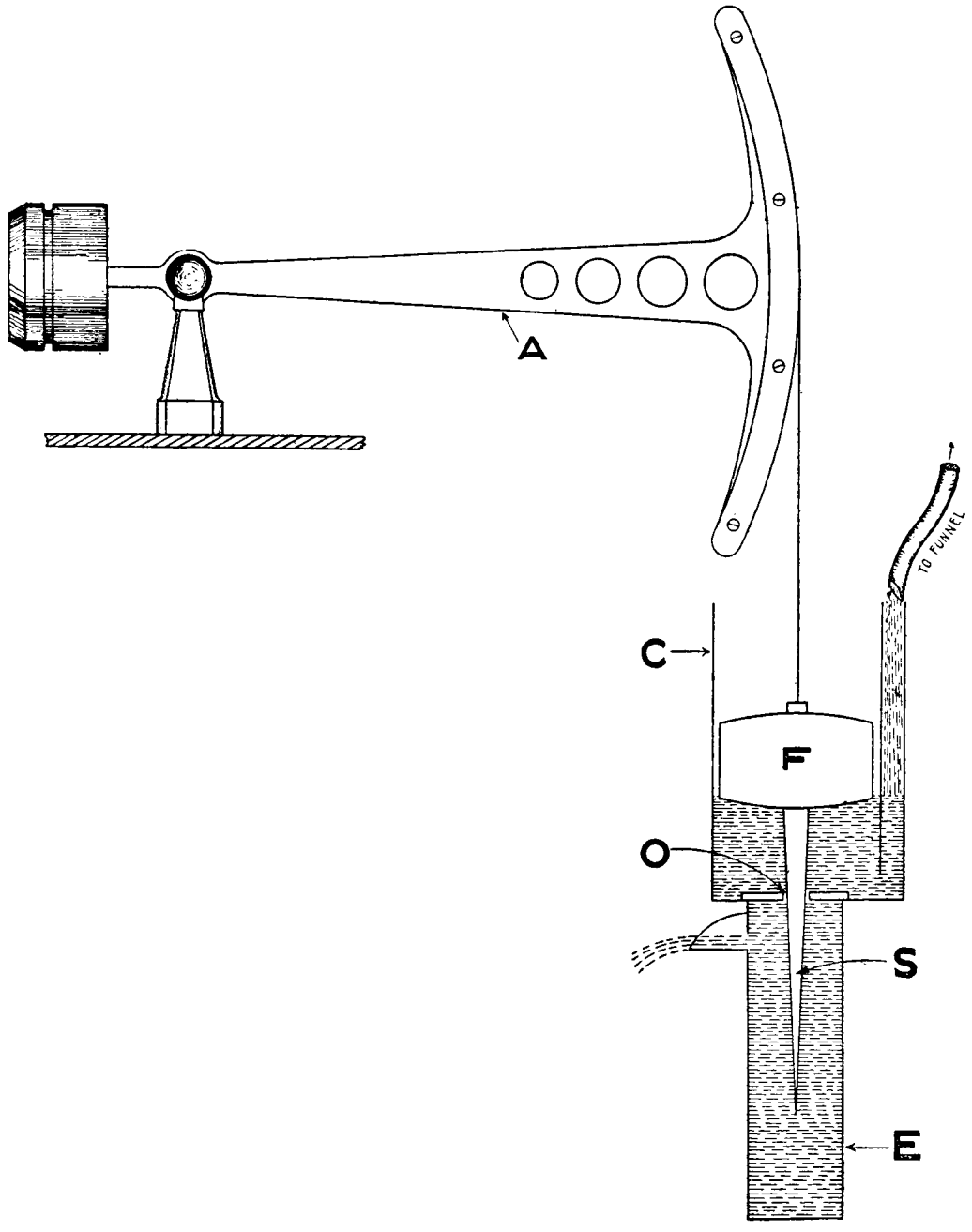
THE JARDI RATE-OF-RAINFALL RECORDER.

Since May 1929 measurements of the rate of rainfall have been recorded at Eskdalemuir by means of a Jardi recorder.* The instrument is a pen recording one in which the rate of fall is recorded on a ruled paper chart as an ordinate drawn from a fixed base line, the length of the ordinate being proportional to the rate of fall.

The essential parts of the instrument are shown on the accompanying sketch. They consist of a cylindrical metal chamber C, about 4 cm. diameter, to which a cylindrical metal extension E, about 2 cm. diameter, is permanently attached. Suspended by a German silver metal strip in the upper chamber C is an airtight metal float F which is balanced by a suitable weight on a metal arm A. To the base of the float is screwed a tapered metal spindle S, 11 cm. long. The spindle passes through a hole O in the partition between the upper and lower parts of the float chamber, and when the float is resting on the partition (its zero position) the spindle just closes up the hole in the partition. On one side of the upper chamber is a tube down which the rainwater is led from the collecting funnel. As the rainwater enters the float chamber at the bottom of the tube it raises the float and spindle, thus causing a gap between the spindle and the side of the hole in which it moves, thereby allowing the water to pass from the upper to the lower chamber where it escapes via a spout. The float rises until the rate of entry of the rainwater into the float chamber is equal to the rate of exit through the annular space around the tapered spindle. The motion of the float then actuates the arm A, which through a series of levers and a pivoted pen arm, draws an ordinate(corresponding to the rate of fall) on the chart wrapped round a revolving drum which rotates once in twenty-four hours.

In order to conform with the exposure of the other rain gauges at the Observatory, the Jardi recorder was housed originally in a pit surrounded by a turf bank, the top of which was on the same level as the top of the funnel of the gauge, but owing to difficulty in draining the pit, the floor was raised and the funnel is now about two and a half feet above the level of the surrounding turf bank. The original funnel supplied with the recorder was 19 inches in diameter, and the maximum rate of fall recordable on the chart was 800 millimetres per hour. After some experience of the

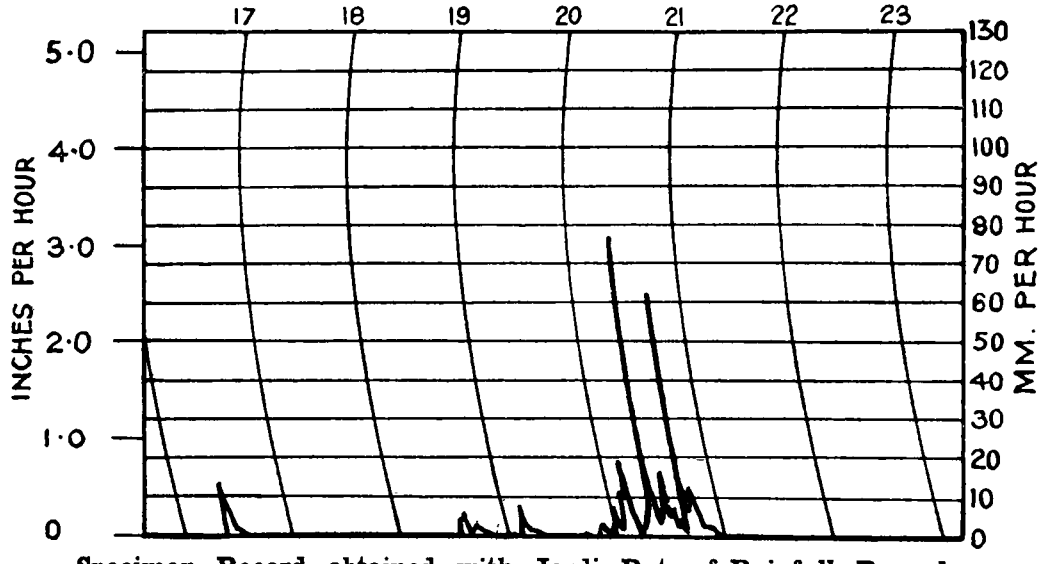
* This instrument was made by J. Richard, of Paris, to the design of Dr. Ramon Jardi, of Barcelona. A full description will be found in *Memories de l'Institut d'Estudis Catalans*, Vol. I, Fasc. II, Barcelona, 1927.



Jardi Rate-of-Rainfall Recorder.

instrument it was decided that 200 millimetres per hour would be a sufficiently large rate of fall for which to provide, and consequently the sensitiveness of the instrument was increased fourfold by doubling the diameter of the funnel. The chart is 100 mm. wide, so that the scale value is 1 mm. ordinate equals a rate of fall of 2 mm. per hour. Several high rates of rainfall have been recorded, the most noteworthy of which were the following :

Date, 1930	Time h. m.	Rate of Fall mm./hr.	Remarks
June 23..	22·15	78	Heavy shower of thunder type falling from Cumulo Nimbus clouds. Wind S.S.E. 2. Barometer falling.
June 30..	21·25 21·45	77 63	Thunderstorm. Rain falling from Cumulo Nimbus and Nimbus clouds. Mainly fair all day, with light wind.
August 19	00·10	61	Heavy rain associated with a thunderstorm.
August 21	12·30	78	Heavy rain in a "clearing shower" following continuous rain throughout the night. Wind S.E. Barometer turning and beginning to rise.



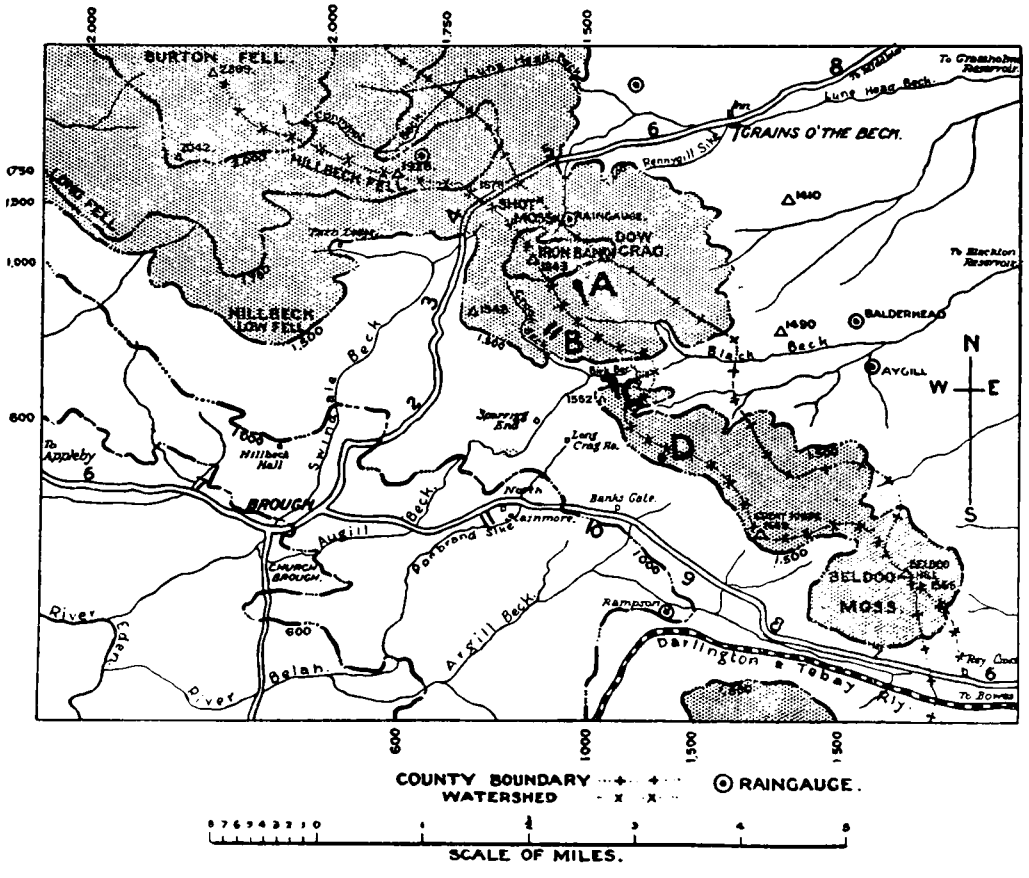
Specimen Record obtained with Jardi Rate-of-Rainfall Recorder.

Part of the chart of June 30th is reproduced above. During a continuous fall of rain the mean ordinate measures the mean rate of fall, whilst the peaks record the sudden increases in rates of fall during heavy showers.

THE CLOUDBURSTS ON STAINMORE, WESTMORLAND, JUNE 18th, 1930.

By F. Hudleston, M.Inst.C.E.

On the afternoon of June 18th, 1930, a series of cloudbursts occurred in that part of Stainmore Forest, in the Pennine range of hills which is called "Knipe Moor," and lies to the north-east of Brough, against the boundary between Westmorland and Yorkshire, between the two roads Brough-Bowes and Brough-Middleton in Teesdale. Two of these cloudbursts, letters "A" and "C" in the map, covered



fairly large areas of two and four acres respectively, one other circular scar "D" was some 50 ft. in diameter, and there were two more smaller but very noticeable scars at "B."

All five scars have had the whole of the peat removed down to the surface of the boulder clay, which here overlies the carboniferous series of limestones and grits. The peat varies from 4 to 10 ft. in thickness above the clay.

The afternoon of that day was very thundery in Cumberland and Westmorland; a heavy thunderstorm travelled from Patterdale to Newton Rigg, and gave the following catches in regularly observed rain-gauges. Patterdale 1·20 in., Mell Fell House ·98 in., Hutton John ·96 in., Ennim 1·21 in., Newton Rigg 2·38 in., Nunwick Hall ·45 in. and Renwick ·17 in. Immediately south of this track and on the Cumberland shore of Ullswater there was only ·06 in. at Hallsteads and ·04 in. at Rampsbeck, but another less intense thunderstorm occurred over Barton House (near Pooley Bridge), ·58 in., Lowther Castle ·41 in., Penrith ·37 in., Morland ·38 in., and Temple Sowerby ·18 in.

In the Upper Eden Valley rain-gauges are few in number, but three regular observers give the following catches for the rainfall day. Appleby ·01 in., Kirkby Stephen ·27 in., Rampson (barely two miles south of the cloud-burst "D") got ·45 in., and most of this particular catch seems to have fallen an hour or two after the first cloudburst.

The intense discharge of rain seems to have been concentrated on Knipe Moor, and Mr. G. R. Collinson (Engineer and Manager of the Tees Valley Water Board) estimates the following catches that afternoon, in his *monthly* gauges of this district. Dow Crag 2½ in., Lunehead 1½ in., Hargill ¾ in., and only ½ in. at Connypot and at Balderhead. The gauge at Dow Crag is 1,000 yards north of the scar at "A"; Lunehead is about one mile north of Dow Crag, and the others are further away.

The peat moss and fibre of the big scar at "C" went down the Eden river as a black, filthy solution, which choked many thousands of trout as far down as Appleby, some 16 miles below the spot where it was dug out of the moor. The flood reached Appleby at 19h. but it did not flow over the banks of the river there. All along the river Eden the banks were covered with a deposit of peaty mud as far as Langwathby, which is fully 30 miles down-stream from Knipe Moor.

The Pennine range of hills to the north and south of Knipe Moor is considerably higher than Knipe Moor itself, but the valley at Brough forms a sharp re-entrant angle into the "backbone of England," and it seems to have shepherded this particular thunderstorm right on to Stainmore, for there was a slight W.S.W. wind all that afternoon. The watershed line between the river basins of the Eden and the Tees here runs along the centre line of Knipe Moor; all the rain that fell to the east of the watershed ran down into the Tees Valley Water Board's reservoirs at Grassholme and Blackton, which collected 165 and 67 million gallons respectively between 13h. 30m. and 14h. 30m. that day, but the Eden Valley has no reservoirs and we have no records on the Westmorland side to compare with the latter figures. Mr. Collinson estimates that the Grassholme catch actually fell over twelve square

miles of its gathering ground (*i.e.* an average of at least one inch over the twelve square miles where there is no actual cloudburst " scar "), while Blackton's supply came off three square miles, with an average intensity of one and a half inches, but these three square miles included the cloudburst " scar " at " A ". These *averages* are nothing out of the way for a thunderstorm in a hill country, but Dow Crag gauge, which is 1,000 yards away from " A ", caught 2½ in. in the hour, and the maximum intensity must have been far greater near the actual cloudburst.

On October 16th, 1930, four months after the cloudburst, I was piloted over Knipe Moor by Mr. F. Alderson, the game-keeper, who lives at North Stainmore, and had figured in a remarkable photograph, taken of the flood across the main road there, which appeared in the local paper at that time, and had also taken part in rescuing many cattle surrounded by the various floods. He had come down off his moor that morning, as it was plain that something unusual was going to happen, but he knows the ground better than anyone else and he had explored his moor thoroughly since June 18th, and could show me exactly what the storm had done there.

The only close eye-witness at the time of the cloudbursts was Mr. R. Carruthers, the game-keeper on Hillbeck Moor, which lies on the north-west side of the Brough-Middleton road. He was out on his moor that afternoon, and saw the first burst over Shot Moss, from a place called Tarn Lodge, on Hillbeck Fell, about two miles west of the scar marked " A " on the map. An intensely black cloud gathered over the northern part of Knipe Moor, terrific lightning occurred, and there seemed to be a solid fall of water which covered the whole of Shot Moss until it looked like a " sheet of water." But he could not have seen the actual downpour which made the scar at " A ", for it was ¾-mile on the further side of Iron Band (1,845 feet), the highest ground on Knipe Moor, and on the east side of Shot Moss, so that Shot Moss was the only portion of Knipe Moor that he could actually see from his point at Tarn Lodge ; but other evidence available points to this particular burst as the one that started the flood into the Tees Valley reservoirs. The rain, which Mr. Carruthers saw falling on Shot Moss would drain away down three channels, *viz.*, into Lunehead beck, and so to Grassholme; into Swindale beck, and so through the town of Brough; and into Crook beck, and so past Spurrigg End farm to the Bannerdale beck, Augill beck and Church Brough, where many houses were flooded that afternoon.

Mr. Alfred Dent, the farmer at Spurrigg End, which is the highest farm up the Augill Valley, and only a mile below the burst at " C ", tells me that three distinct floods went past his farm house that afternoon, and that it was the last of the three, originating at the scar " C " at the top of Birkbeck Gill, which brought down the peaty

filth that suffocated the fish in the Eden. The first of these floods would seem to have been the one seen by the Hillbeck game-keeper, while the second came, perhaps, from the two small cloudbursts at "B" on the map. Spurrigg End farm house is on the right hand bank of the beck, and well above its level, but the small stone bridge, leading across the beck to the farm and said to have been about 5 or 6 feet wide, was entirely carried away, and for the next 1½ miles the flood demolished every bridge across it, and every field wall that touched its course, until it reached the Brough-Bowes main road, where the old stone arched bridge—21 ft. span and about 7 ft. high—was just large enough to allow the flood to pass beneath the crown of its arch, for the water had then spread itself out very much. This stone bridge has dealt with every flood here for some centuries, but it is fortunate that the cloudburst of last June was confined to a comparatively small portion of the catchment area above the main road.

The actual scars of the cloudbursts are rather imposing; that at "C" is the largest one, its south arm is 400 yds. long from south to north and about 40 yds. east and west, with a branch to the west along Birkbeck Gill about 100 yds. long, by 30 yds. wide, the whole area that is bared down to the boulder clay being about four acres, while Birkbeck Gill below the scar is much scoured out by the flood. There are still left numerous huge lumps of peat on the surface of the clay but most of it has disappeared and the banks of the scar are ten foot high at the northern end where the gill itself begins. It would seem as if a jet of water 30 or 40 yds. wide had travelled from south to north (*i.e.*, downhill), and that the western arm might have been made by the flow from this jet, for Birkbeck Gill is a pretty deep cleft in the ground and would have kept the water from spreading sideways.

The other big scar at "A" (within the catchment area of Blackton reservoir) is upon ground that *rises* from south to north, and there is a gigantic furrow some 400 yards long running south from the scar, which eventually dies out where the Black beck channel took charge of the flood and carried it on to Blackton reservoir.

This scar is about 150 yards long from south to north by 50 yards wide and it seems, like that at "C," to have been dug out by a jet of water travelling from south to north, but it is on the Yorkshire side of the watershed, so that Blackton reservoir collected all the water that actually performed the excavation of the peat. The estimated quantity of water is 67 million gallons which is equivalent to 300,000 tons, and three square miles (the estimated area over which rain fell) equals 2,000 acres, while the scar is only 2 acres in extent. The unknown quantity is obviously how many inches deep a mass of water must be to perform the job and from what height it fell. Perhaps someone acquainted with the operations

of " Hydraulic Mining " can hazard an answer to the problem ; there certainly seems to have been plenty of water available and the height it fell from must (I imagine) have been several hundred feet. The peat on Knipe Moor is pretty soft, while the boulder clay beneath the peat is fairly hard—your feet do not sink into it appreciably as you walk over it—and the cloud burst has not had force enough to " shift " it appreciably, although it has most effectively removed the overlying peat which here varied from 4 to 9 feet in thickness.

The two small scars at " B " seemed comparatively trifling after one had explored "A" and " C " and I have many times seen scars like them on the fells, but the scar at " D " on the hillside above Banks Gate, which seems to have been made at 15h. is fairly impressive and it can be seen from the Brough-Bowes main road. It is a circular scar about 50 feet in diameter and just above the 1,500 feet contour on the 6 inches ordnance maps, *i.e.*, almost at the crest of the hillside. 700 yards south of the scar a fairly deep gully, perhaps 15 feet below the surface of the ground on its south side, runs from west to east and in this gully are a series of " swallow holes." These swallow holes must have taken charge of all the water from this particular burst because a little further to the east the gully is actually *crossed* by a dry stone wall that has not been disturbed ; yet the petrol filling station on the main road 400 yards further down the hillside was flooded out by water which must have fallen on the ground between it and the swallow hole gulley just referred to.

The Brough-Bowes main road close to the Punch Bowl Inn, in the hamlet called North Stainmore, dips sharply into the little valley of the Powbrand beck and the stream itself is carried under the main road by a culvert only 5 ft. wide by 4 ft. 6 in. high, which deals satisfactorily with our customary rains. On June 18th an extraordinary fall of rain occurred a mile up this little valley at Long Crag House and the culvert was completely " drowned," the stone parapet walls of the main road were carried away and a flood 2 or 3 ft. deep crossed the road catching a motor car in the very act of passing the dip. But there is no sign of any cloudburst in this little valley and the whole flood at the Punch Bowl was just an extremely heavy fall of rain.

The flood waters at Banksgate and at North Stainmore went eventually down the Argill and Powbrand beck into the Eden and no rain at all fell a mile further east of Banks Gate. The *Argill* beck, unlike the Augill beck, was not flooded to any unusual extent, for very little of its gathering ground was affected that day.

The scar at " D " is roughly circular and might have been dug out by the sudden collapse of a heavily charged cloud driven upwards by the steep face of the hillside there, but the scars at " A " and " C " are long ellipses and seem to have been dug out by some spout of water which

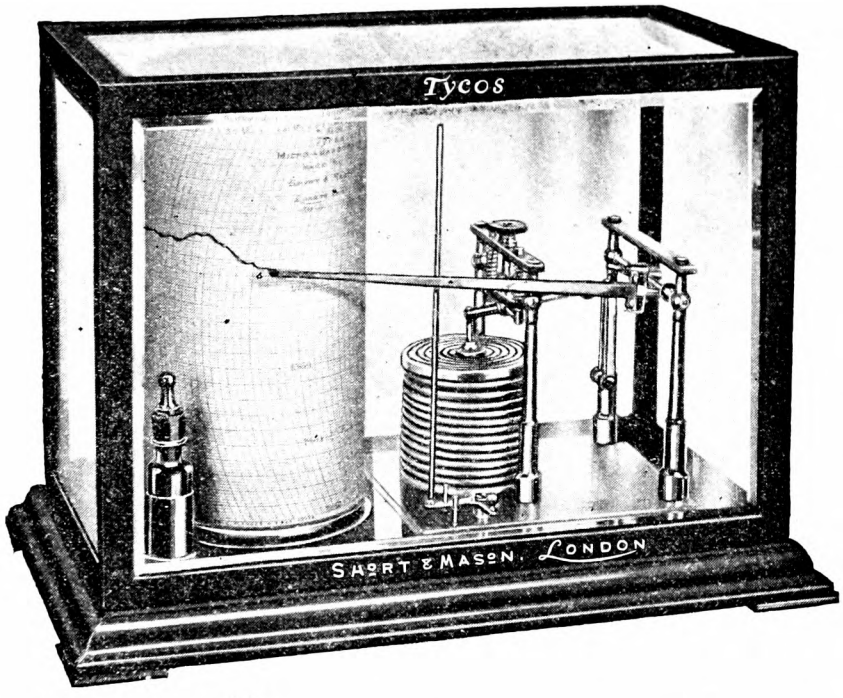
travelled from south to north, both places being a long way from the edge of the high-lying ground that forms Knipe Moor. The eye-witnesses all agree that terrific lightning played its part in the work and at "A" and "C" the lightning seems to have bided its time until the heavily charged clouds had arrived at the very highest part of the moor, *i.e.*, at the watershed line of the Pennine range of hills. In fact, all five bursts are practically upon the watershed summit.

The thunderstorm was quite an event, it began *after* 13h. in the northern part of Knipe Moor, was apparently worst in the southern part at 15h. and was finished by 16h. when a fine evening set in. The main road (Brough-Bowes) was flooded at several places and many cars were held up. One witness tells me he saw a spout of water coming up out of the ground on the north side of the Brough-Bowes road about ¼ mile east of North Stainmore, obviously an inlet of one of the underground channels of the numerous swallow holes you find hereabouts. A few sheep were drowned but everybody seems to have managed to get his cattle out of the way of the floods in the several valleys. Most eye-witnesses dwell on the appearance of a "sheet of water" over the hillside which they were looking at, but nobody was near the bursts at "A," "B" or "C", and indeed I doubt if anyone would have lived to tell the tale had he been near them. Several dead sheep were found near "A" and "C" and the Knipe Moor game-keeper found the bodies of many grouse that seemed to have had the life beaten out of them by the mere force of the falling water.

The Brough-Middleton road on the Yorkshire side of the watershed was damaged somewhat by the water pouring across it into the channel of Lunehead Beck and the bridge over Rennygill Sike was partly carried away. There are many swallow holes to the north and north-west of Dow Crag and these may perhaps account for the very heavy rush of water at Rennygill bridge which is 2 miles N.N.E. of Dow Crag and close to the Inn at "Grains in the Beck."

I found several swallow holes by the road side between the county boundary and Rennygill bridge, which had "spewed out" large quantities of shale and stones obviously because their underground channels were too full to carry away the water poured into them at some higher level.

Printed under the Authority of His Majesty's Stationery Office,
By C. TINLING & Co., LTD., Liverpool, London and Prescot.



"Tycos" MICRO-BAROGRAPH

This instrument is a modern development of the well known Barograph (Stormograph) or Recording Barometer.

As compared with those of any ordinary Barograph its visible records are much more graphic. This is due to the particularly high degree of sensitivity obtained, by means of which even the slightest atmospheric change is readily recorded.

The movement is efficiently compensated for temperature and, for practical work, temperature errors are negligible.

SHORT & MASON LTD

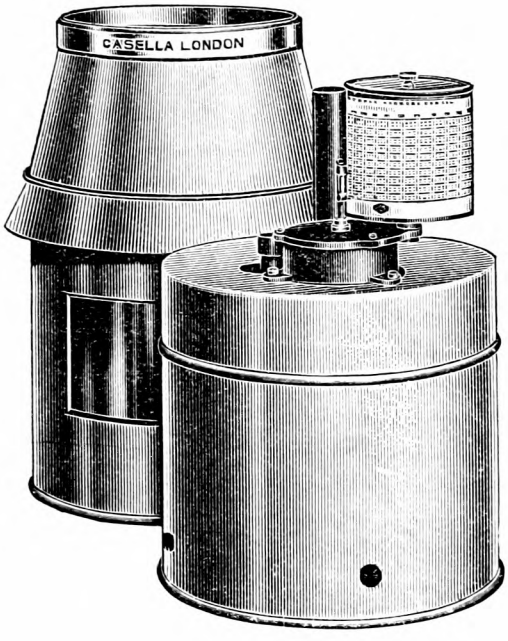
Scientific Instrument Makers,

Aneroid Works, Walthamstow, London, E. 17.

Showrooms: 45/50, Holborn Viaduct, E.C. 1.

CASELLA'S SIPHON RAINFALL RECORDER

As supplied to Meteorological Departments and Public Bodies throughout the world



Extract from a letter received from a Meteorological Department abroad:—

"1st Aug., 1930.

"Dear Sirs,

"Your Siphon Rain Gauges "are considered one of the "most satisfactory types of "self-recording rain gauges we "have tested....."

£18:0:0

Full particulars on application

C. F. CASELLA & CO. LTD.

Regent House, Fitzroy Square,
LONDON, W. 1